PROVINCE OF NOVA SCOTIA

REPORT OF THE

Provincial Tuberculosis Hospitals

NOVA SCOTIA SANATORIUM

AND

POINT EDWARD HOSPITAL

FOR THE YEAR ENDED DECEMBER 31

1965

Queen's Printer
Halifax, Nova Scotia

To His Honour,

THE HONOURABLE H. P. MacKEEN, C.D., Q.C.

Lieutenant-Governor of Nova Scotia

Sir:

I beg to present herewith the report of the Provincial Tuberculosis Hospitals.

I have the Honour to be

Sir,

Your most obedient servant,

RICHARD A. DONAHOE, Q.C.

Minister of Public Health

101-03455/

J. S. ROBERTSON, M.D., D.P.H.,

Deputy Minister,

Department of Public Health

Sir:

I have the honour to submit the Eighth Annual Report of Provincial Tuberculosis Hospitals. This is made up of the Sixty-First Annual Report of the Nova Scotia Sanatorium and the Seventeenth Annual Report of Point Edward Hospital. These reports cover the calendar year, 1965. They are preceded by Table A., a combined statistical report.

Respectfully submitted,

J. E. HILTZ, M.D., D.P.H.,

Administrator

Tuberculosis Control Services

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TABLE A

COMBINED STATISTICAL REPORT

FROM THE NOVA SCOTIA SANATORIUM AND POINT EDWARD HOSPITAL

CONCERNING THE PATIENT POPULATION, EXCLUDING TREATMENT OF SICK STAFF

FOR THE CALENDAR YEAR 1965

	Nova Scotia Sanatorium Est. 1904	Point Edward Hospital Est. 1949	Both Hospitals
Number of patients in residence January 1, 1965	143	88	231
Number of patients admitted as first treatment experience during 1965	194	120	314
Number of patients admitted having had previous treatment for tuberculosis	94	29	123
Number of patients transferred from another institution	20	15	35
Number of patients admitted to continue treatment (temporarily released)	3	8	11
Number of patients admitted for review or evaluation only	22	44	66
Total admissions during year	333	216	549
Number of patients in residence during year	476	304	780
Number of patients discharged during year	341	230	571
Number of patients in residence January 1, 1966	135	74	209
Number of patient days of hospital care during year	54,191	31,435	85,626

Sixty-First Annual Report

INCLUDING

Medical Supplement

OF THE

Nova Scotia Sanatorium

FOR THE YEAR ENDING DECEMBER 31, 1965

GENERAL INFORMATION

Free treatment for tuberculous persons in Nova Scotia became effective July 1, 1946. Application for admission of a tuberculous patient to the Sanatorium is made by the family physician through the Director of the Health Unit of his district recommending further investigation and/or treatment for the patient. If approved, the Director then contacts the office of the Medical Superintendent requesting the admission which is authorized without delay.

The Sanatorium may be reached daily by the Dominion Atlantic Railway. Taxis meet all trains at Kentville, from which it is only a short drive to the Sanatorium. There are good bus connections daily to and from Kentville.

An information pamphlet, "Health Ahead", is available from all Health Unit Directors and from the Sanatorium. Prospective patients should read this before coming forward for admission in order to be informed regarding clothing requirements, visiting hours for friends and other pertinent matters.

NOVA SCOTIA SANATORIUM

Kentville, N. S.

1965

HONOURABLE RICHARD A. DONAHOE, Q.C.

Minister of Public Health

—ADMINISTRATIVE AND TECHNICAL STAFF—

Medical **Full Time Staff**

*J. E. Hiltz, M.D., D.P.H., F.C.C.P. ..... Medical Superintendent
*Helen M. Holden, M.D., F.C.C.P. ..... Asst. Medical Superintendent
*J. J. Quinlan, M.D., F.C.C.P. ..... Thoracic Surgeon
F. J. Misener, M.D., F.C.C.P. ..... Radiologist and Anaesthetist
A. Laretei, M.D. ..... Physician
Maria Rostocka, M.D. ..... Physician
G. A. Kloss, M.D., F.C.C.P. ..... Physician and Anaesthetist
E. W. Crosson, M.D. ..... Physician

Consulting Staff

*V. D. Schaffner, M.D., F.A.C.S. ..... Surgeon
*D. M. MacRae, M.D., F.C.C.P. ..... Bronchoscopist
*B. F. Miller, M.D., F.R.C.S. (Edin.) F.R.C.S. (Can.) ..... Consultant in Orthopedics
*E. J. Cleveland, M.D. ..... Consultant in Psychiatry
*F. R. Townsend, M.D. ..... Consultant in Psychiatry

Courtesy Consulting Staff

T. A. Kirkpatrick, M.D. Obstetrics and Gynaecology (died, March, 1965)
D. H. Kirkpatrick, M.D. ..... Anaesthesia

Dental

R. H. Stanford, D.D.S. ..... Dentist
K. B. Eaton, D.D.S. ..... Consultant Dentist

*Certified in specialty by Royal College of Physicians and Surgeons of Canada

Nursing

Mrs. Hope M. Mack, R.N. ..... Director of Nursing
Miss Madeline Spence, R.N. ..... Director of Nursing Services
Robert MacKenzie, R.N. ..... Director of Nursing Education
Mrs. Catherine Boyle, R.N. ..... Clin cal Instructor
Mrs. Lyn Lewis, R.N. ..... Clinical Instructor
Mrs. Norma Hounsell, R.N. ..... Clinical Instructor

Laboratory

Mrs. Mae Margeson, R.T. ..... Senior Technician
Miss Helen Morse, R.T. ..... Technician
Mrs. Helen MacKinnon ..... Technician
Mrs. Lorna Evans ..... Technician (resigned 1.7.65)
Mrs. Sheila MacPherson ..... Technician
Miss Bonnie Kierstead ..... Technician
Mr. Glendon Gates ..... Assistant Technician

Rehabilitation Department

F. G. Barrett, B.Sc., M.Sc. — Director of Rehabilitation
D. M. Brown, B.A., B.Ed., M.S.W. — Social Worker and Asst. Director
Miss Marguerite MacLeod — Academic Instructor
Miss Marion Lacey — Academic Instructor
Mrs. Mary MacKinnon — Academic Instructor (on study leave 8.9.65)
Mrs. Violet Silver — Handcraft Instructor
Clifford Boeler — Handcraft Instructor

X-Ray Department

John L. Hines, R.T. — Senior Technician
William Mansfield — Technician
Robert Ferguson — Assistant Technician

Physical Therapy Department

Mr. Adi S. Jagosh, R.T. — Therapist-in-Charge
Mrs. Ruby Bhesania, R.T. — Therapist
Mrs. Gertrude Cook, C.N.A. — Assistant Therapist

Dietary Department

Miss Eileen Quinlan, B.Sc. — Director of Dietary Service
Miss Virginia Allen, B.Sc. — Dietitian
Mrs. Josephine MacInnis, B.Sc. — Dietitian

Medical Records Department

Hector McKean, R.R.L. — Records Librarian
Mrs. Hazel LeFave — Asst. Records Librarian
John Lawrence — Asst. Records Librarian

Business Office

R. P. MacKenzie, B.Comm., D.H.A. — Administrative Assistant

Chaplains:

Right Rev. J. H. Durney, Parish Priest and Roman Catholic Chaplain
Rev. J. D. MacLeod, D.D., United Church Chaplain
Rev. J. A. Munroe, Anglican Chaplain
Prof. (Rev.) Charles Taylor, B.A., B.D. (Acadia), S.T.M. (Andover Newton)
Chaplain-Supervisor, Clinical Pastoral Training, Nova Scotia Sanatorium;
Associate Professor of Practical Theology, Acadia University

Medical Records Committee:

Dr. H. M. Holden, Chairman
Mr. A. H. McKean, Secretary
Dr. A. Laretei
Dr. M. Rostocka
Dr. G. A. Kloss
Mrs. Hope Mack, R.N.
Mr. R. P. MacKenzie

Tissue Committee:

Dr. G. A. Kloss, Chairman
Dr. F. J. Misener, Vice Chairman
Dr. J. J. Quinlan, Secretary

Pharmacy Committee:

Dr. M. Rostocka, Chairman
Mrs. Shirley Maxwell, C.D.C., Secretary
Dr. H. M. Holden
Dr. E. W. Crosson

This is the sixty-first annual report of the Nova Scotia Sanatorium since its founding in 1904. The information it contains is for the calendar year 1965.

The buildings at present in use for the care of patients were built in 1904, 1917, and 1931. Only the last mentioned is of a form of construction which might be called permanent or semi-permanent. We are looking forward to the day, therefore, when our patients may receive care in more modern and more appropriate type structures designed for adequate medical and surgical investigation and treatment of long term illness occasioned by diseases of the lungs.

During 1965, more patients were treated at the Nova Scotia Sanatorium than for many years. There were 476 such patients. This number included those treated for the first time and those who returned for a repeat performance; and also patients admitted for review or assessment of their tuberculous disease which was still being treated or disease which was suspected of having reactivated after a period of what had appeared to be satisfactory healing. (Table I) Of the total under treatment, 333 patients were admitted during 1965. By the same token, there were more patients discharged during the year thus leaving fewer patients in residence at year end. The patient days of treatment further declined to 54,191 from 56,314 during the previous year. This lower total number of days of treatment for the care of an increased number of patients is a reflection of the trend toward shorter periods of in-sanatorium care than was usual in past years.

Of the 333 patients admitted during 1965, 194 came as a first treatment experience whereas 94 had been treated previously either here or at some other tuberculosis institution (Table II).

Disregarding the patients who were admitted to the Sanatorium for a short period of review, there were 320 patients (Table III a) discharged during the year. Of these 231 were first admissions and 89 were readmissions. A total of 105 had definite or suspected pulmonary disease of a nontuberculous nature (Tables III a and IV). Twenty-one of the patients had tuberculous disease of major proportions involving organs and tissues other than the lungs.

Of the 21 review cases discharged during the year only 4 were found to have active disease requiring them to undertake treatment again.

This year, as in the past, our physicians have been presented with patients who had varied forms of tuberculosis requiring treatment either as the main condition present or as a secondary but important complication of the main lesion (Tables III a and III c-A). In addition, myriad nontuberculous conditions required diagnosis and treatment as shown in Table III c-B. Of these, 25 patients had their disease complicated by diabetes mellitus and 22 by coronary artery heart disease to mention only the two complications which occurred with the greatest frequency. Five patients had lung cancer as a complication of their tuberculosis.

Of the 105 persons discharged with a main diagnosis other than tuberculosis (Table IV a) fifteen, after thorough investigation, did not yield evidence of any significant disease. Of the others, the main conditions which led to the patients' admissions for investigation and treatment were various forms of penumonia (24 cases), lung cancer (12 cases), bronchiectasis (7 cases), cystic disease of the lung (6 cases), and fibrosis of the lung (6 cases).

The great variety of major and minor nontuberculous diagnoses encountered (Table IV a) further stresses the often mentioned fact that professional staff members must be well trained, knowledgeable, and alert if they are to provide an acceptable service for Nova Scotians admitted to the Sanatorium.

Of the 105 nontuberculous patients referred to the Sanatorium, 50 per cent were from the Fundy Health Unit are but all parts of the Province were represented to a lesser degree (Table IV).

Almost 90 per cent of the first admission cases and over 85 per cent of the readmissions were discharged from the Sanatorium with evidence of very satisfactory improvement (Table V). On the other hand an increasing number of patients were restless and received irregular discharges—against medical advice or were asked to leave because of misconduct—(Table VI a, b, and c), 18.1 per cent compared to 12.7, 10.9, and 16.6 per cent in the three previous years. These irregular discharges seemed to be fairly uniformly distributed over all age groups (Table VI d) with some preponderance between the ages of 20 and 39 years. It is difficult to account for this as treatment procedures have not changed significantly during the year, medical staff has not varied over the past ten years and our nursing staff did not suffer any greater shortages than usual although there is always a lack of a sufficient number of graduate nurses.

When calculated using a formula devised by the National Tuberculosis Association (Table VI e) the ratio of irregular discharges reached 21.1 per cent which was much the same as previous years since 1960, except for the two immediately preceding the current one. Indeed, even this year was a great improvement over 1959 when irregular discharges reached 39.5 per cent.

Of the 39 persons irregularly discharged during 1965, in only 17 was their tuberculous disease unstable. The remaining 22 with fairly stable disease might hope to obtain a good result ultimately if they persevere with treatment at home. Some of the 17 with unstable disease will return to us soon with extending tuberculosis, some will go elsewhere for treatment and some will continue to present the Health Unit Directors with the vexatious problem of whether or not to take them into court to be charged under the Public Health Act—always unpleasant but sometimes, unfortunately, the only way to protect their associates either at the time or ultimately. Tuberculosis in its unhealed state is an infectious and contageous disease.

Unfortunately, one quarter of the first admissions to Sanatorium and one third of the readmissions had far advanced tuberculosis of the lungs and, indeed, 64 per cent and 78 per cent respectively had moderately to far advanced disease. However, this is an improvement as compared to figures for the years 1955, 1945, and 1955. (Table VII). One would hope that the trend of bringing patients under treatment when their disease is in the minimal or early stage would continue to increase. Indeed, only one quarter of the new cases were in this early stage of disease. Of late years, more children with primary infection have been treated here than was the case ten years ago. (Table VII)

This is indicated in Table VIII-a which also demonstrates that increasing numbers of our patients are over 60 years of age compared to previous decades. Indeed, on the last day of the year under review almost one third of the patients were sixty years of age or older and only 15 per cent were under thirty years of age (Table VIII b). This is a trend which has been very evident over the past ten or more years. For this reason the Sanatorium maintains a geriatric ward where the elderly patient may associate with others of like age and can receive special assistance and care as required. These older patients are the ones who have more nontuberculous complications such as heart disease and diabetes and require constant supervision and treatment. Frequently, too, it is difficult to find a suitable home situation to which they may return to continue treatment not only for tuberculosis but for any other complicating condition.

At year-end, approximately 40 per cent of patients remaining in hospital had far advanced tuberculosis (Table VIII c) and this extensive disease was more evident among the older age groups (Table VIII d), and also more prevalent among the males than the females (Table VIII e).

Of the patients admitted and readmitted during the year 25 per cent were over sixty years of age (Table VIII e) whereas at year-end, as mentioned before, almost 30 per cent were over sixty. This suggests that persons with advanced disease and in the older age groups are inclined to remain in hospital longer than the younger patients. This finding is not surprising.

Over one third of our patients belong to the Roman Catholic faith (Table IX).

Patients at the Sanatorium come from all parts of our Province (Table X) with an unusually high proportion of admissions and readmissions coming from Kings County this year; 25 compared, for instance, to only 30 from Halifax County which has a very much larger population.

MEDICAL SERVICE:

The medical service is the backbone of any hospital and, as such, all our physicians contribute to it whether their other and perhaps main duties involve them in anaesthesia, surgery, radiology, physiotherapy, or laboratory work. All must work as a team to provide basic medical care. All attend our twice weekly staff conferences; all participate in our out-patient clinics three times a week; all take their turns "on duty" at night and over weekends so that the hospital may remain functional twenty-four hours each day for seven days a week, fifty-two weeks in the year. For each specialty job such as anaesthesia, surgery, bronchoscopy, radiology, pulmonary function testing or physical medicine, there must be two physicians available so that the normal hospital functions continue in an uninterrupted fashion in spite of sickness or vacations.

SURGICAL SERVICE:

The work of our surgical service is shown in Table XI a to g. As has been the case for the past number of years, the major surgical undertakings involved the removal of lung tissue, either a whole lung or lesser amounts down to a small wedge of tissue. This operation was carried out on 62 occasions, 50 of them for tuberculosis of the lung, five for removal of lung cancer and seven others for miscellaneous conditions (Table XI c).

In regard to the tuberculous patients, on only one occasion was a whole lung removed (pneumonectomy). An entire lobe of a lung was removed (lobectomy) on 19 occasions. No operative mortality occurred this year among this group of 50 patients undergoing removal of lung tissue for the treatment of tuberculosis.

Approximately one third of all our first admission cases (37%) underwent a pulmonary resection compared to 40 to 46% during the previous three years. Twelve per cent of our readmissions were so treated, (Table XI D). It should be realized, of course, that many of the cases were referred to the Sanatorium from Point Edward Hospital specifically for this purpose.

Other major surgical undertakings are listed in Table XI E. These include extraperiosteal plombage of the lung in five cases. This involves the release of lung tissue and packing it down with lucite (plastic) spheres and "doughnuts" to bring about permanent collapse of a portion of the lung. It is carried out when the disease is too extensive to permit its removal without serious hazard to the patient.

One baby was born to a tuberculous mother at the Sanatorium.

Various other minor surgical procedures performed are listed in Table XI F.

X-RAY SERVICE:

The work in this department (Table XII) continued at a very satisfactory level. Its undertakings within the institution remained much the same but there was some decline in the numbers of x-ray films sent in to the Sanatorium for interpretation. In large part this reflects less survey work carried out by the City of Halifax.

Our x-ray film developing service for Health Unit Directors increased compared to the previous year, with over 12,000 films having been developed during 1965.

LABORATORY SERVICE:

The work of the Laboratory this year is shown on Table XIII and indicates a slight decrease in its volume compared to the previous two years. It has now reached the stage where the required work can be encompassed by our own staff without undue strain as was the case previously.

The volume of work done in sizeable and very important to us. The diabetic patients alone required the performance of over 1400 blood sugar estimations. The niacin testing of mycobacteria in order to determine whether or not the germs are human type tubercle bacilli and also the testing of bacteria to determine their drug sensitivities are time-consuming but assist in very important aspects of our work.

During the summer months an honours student from Acadia University continued studies here in the identifying of certain types of bacteria which resemble tubercle bacilli but are not. His work was very interesting, helpful, and productive. Six atypical infections were identified among our patients during 1965.

For the first time, this year we have included in our tabulations a listing of the specimens of tissue sent to the Department of Pathology in Halifax. At their rating of 8 units each, these represented 1096 work units which they performed on our behalf.

OUT-PATIENT CHEST CLINIC SERVICE:

The Sanatorium operates an out-patient chest clinic every Tuesday and Wednesday afternoon, and also on Saturday mornings. To this clinic are referred patients who have been found to have positive tuberculin tests at earlier tuberculin test clinics, persons who have been under treatment for tuberculosis recently or sometime in the past in order to determine their present state of health, and also referred are persons who the family physician or Health Unit Directors feel may have developed tuberculosis due to close association with some known case of the disease or who they feel may have some condition of the chest other than tuberculosis.

Over the years our staff have worked together medically and surgically so that they are able to handle efficiently all types of chest disease even accidental injuries caused by car accidents or gunshot wounds. We are happy to provide such a service to the community.

Approximately 3000 persons were examined in our Clinic (Table XIV A). Of these, 699 had previously been patients. Three patients with presumed healed tuberculous disease were found to have active disease once more and two new cases of active tuberculous disease were discovered. These are in addition to a sizeable list of nontuberculous conditions such as pneumonia, asthma, bronchitis, emphysema, and lung cancer which are not listed in the table.

B.C.G. vaccination against tuberculosis was carried out on 65 occasions, mainly sanatorium personnel.

BRONCHOSCOPY SERVICE:

Over 200 bronchoscopic examinations were carried out this year (Table XIV B). This is a most essential investigative procedure before undertaking major chest surgery and as an aid in the diagnosis of lung cancer, bronchopleural fistulas, and in certain types of tuberculosis.

PHYSICAL THERAPY SERVICE:

There was a great upsurge in the service provided by this department (Table XIV C) made possible by the addition to our staff of another therapist and by the fact that the department is open six full days per week.

The number of individual treatments totalled over 16,000. These are particularly helpful for our surgical cases both before and after operation and are also very comforting to many older patients with symptoms caused by arthritic conditions.

Certain diagnostic procedures, too, are the responsibility of this department and these included 280 electrocardiograms for our patients as part of our investigation of heart disease, 3 bronchospirometries (testing lung function of each lung separately) and a comprehensive bank of pulmonary function tests for 91 patients.

MENTAL HEALTH SERVICE:

This year, once again, the staff of the Fundy Mental Health Centre in Wolfville provided us with a comprehensive psychiatric consultation service regularly once a week and more often if requested. The psychiatrists on the staff of the Centre gave lectures on a monthly basis to our student nurses and the psychologist assisted in the evaluation of the capabilities of some of our problem children. The work of this service is presented in tabular form in Table XIV D. It is most appreciated.

DENTAL SERVICE:

This department continued to provide, at no cost to the patients, a dental examination of each new patient followed by necessary fillings and extractions or treatment of unhealthy gums. Artificial dentures are supplied at less than half the cost as the patients are required to pay only for the dental laboratory service which is provided on a commercial basis outside the Sanatorium.

In addition to the above services supplied by our regular Dental Consultant (Table XIV E) the Division of Dental Services of the Department of Public Health permitted one of their dental hygienists to come to the Sanatorium for two to three weeks to provide dental prophylaxis (scaling and polishing of the teeth) for staff and patients. She also provided chairside instruction in tooth brushing and other matters relating to oral health. This service was provided to 76 patients and 57 staff members.

SICK STAFF SERVICE:

A daily clinic, seven days per week, is held for ill staff who are ambulatory whether they reside on the Sanatorium grounds or not. Those who live elsewhere must seek medical care from local physicians if they are too sick to come to our Clinic. Those who live at the Sanatorium, however, are provided with a full medical service and hospital care, if needed. This provision of medical care is much used and much appreciated and, it is agreed, is a factor in preventing the development of more serious illness in many instances.

REHABILITATION SERVICE:

The major change in the department was that our affiliation with the School of Social Work was not renewed this year. The other change was that

the department remained open as a service to the patients for six full days each week instead of the usual five.

The following statistics indicate briefly some of the work of the department:

	Individual Patients Served		
Academic:	1963	1964	1965
School age (0-16)	35	23	17
Past school age (17-21)	8	10	5
Adults (over 21)	24	36	28
By Correspondence	1	0	0
New Canadian Language	0	0	2
	68	69	52
Business, Industrial, etc.:			
Typing	22	16	6
Arithmetic, bookkeeping, etc.	20	18	14
Sewing	46	48	43
Bookbinding	1	1	1
Woodwork	29	15	11
Radio	2	0	0
Watch Repair	1	0	0
Music	1	0	0
	122	98	76
Handcraft:			
a. In shop:			
Photography	0	1	1
Leather	81	70	43
Other	38	24	16
b. At bedside:			
Individual instruction	186	105	103
	264	200	163
GRAND TOTAL	454	367	290

The moderate reduction in the work performed by this department as shown in the above table is due in part to the somewhat diminished patient days of treatment and also by the fact that, although more patients were treated at the Sanatorium during 1965, they remained with us for shorter periods of time and so were not eligible for teaching and handcraft services to the same extent as in former years. Also, more of our patients were in the over-sixty age group which has little interest in "rehabilitation". Another factor in this reduction was the absence, on study leave, of one of our rehabilitation staff members.

There was no reduction in the demand for social service work supplied by this department. Our radio and library services continued as in past years. Much work was done during the year in organizing group sessions for patients one evening a week to hear a knowledgeable speaker and enjoy discussion on topics of general interest, such as nutrition, care of children, economical buying, marital counselling, adolescent growth, race prejudice and like matters.

Monthly parties for patients were organized by this department with the co-operation of church and other community groups.

Transportation was provided for patients to see the Annual Apple Blossom Parade and also the Christmas lighting in the town of Kentville. During the summer, fortnightly short drives for patients were much appreciated by those well enough to partake of this activity.

Health Rays Magazine which was founded in November, 1919, continued to be published eleven times each year. It is now the oldest Sanatorium magazine in Canada, if not in all of North America, to remain in continuous publication. Indeed, we do not know of any other in the world which exceeds its life but, of course, we cannot be sure of this as the world is a rather large place.

PROFESSIONAL EDUCATION:

(a) Medical: Staff meetings were continued two full afternoons each week in order to review the status and medical requirements of all patients having special or x-ray examinations since the previous meeting. All such cases, including new admissions, are discussed by the entire medical staff working as a team. Regular meetings of the Tissue, Medical Records, and Pharmacy Committees are held monthly. The Journal Club meets each week from October to May. Senior members of the Nursing and Laboratory staffs are guests of the Journal Club which serves as a forum for the discussion of modern treatment methods in respect to many diseases.

Drs. Hiltz, Holden, and Kloss attended the Annual Meeting of the Canadian Tuberculosis Association in Toronto in June.

Dr. Hiltz attended the Annual Meeting of the National Tuberculosis Association in Chicago. This was held immediately prior to the Toronto meeting.

Drs. Holden, Quinlan, and Schaffner attended the Annual Meeting of the Royal College of Physicians and Surgeons of Canada in Toronto.

Dr. Kloss and Dr. Crosson attended a special course in Pulmonary Function testing in Boston. This attendance was made possible by a National Health Professional Training Grant.

Dr. Rostocka attended a "Week in Medicine" sponsored by the Postgraduate Committee of the School of Medicine, Dalhousie University.

Dr. Hiltz and Dr. Kloss attended the Annual Meeting of the International Union Against Tuberculosis in Munich, Germany, in October.

The Annual Meeting of the Canadian Public Health Association, Nova Scotia Branch, was held in Kentville in October. Dr. Helen Holden, Assistant Medical Superintendent, was elected President of the Branch and we extend to her our congratulations for this honour. A number of members of our staff attended the sessions of this meeting.

Attendance at meetings such as those listed above are necessary if professional staff are to keep up with modern trends in medicine and surgery. Indeed, a number of the meetings were attended at the sole expense of the physicians, such is their concern about keeping up to date and thereby making the best possible professional contribution to the operation of the Sanatorium.

During July, it was our privilege to have a visit from Dr. Raymond H. Andrews, Ramsgate, England, who was the overseas scholar from the Chest and Heart Association of Great Britain.

Miss Donna MacRae, third year medical student, served as Junior Interne at the Sanatorium during the summer months.

(b) Nursing: The nursing staff is composed of registered nurses, certified nursing assistants and a few aides. There is a continuous program of in-service education at all levels. This includes frequent lectures and staff conferences and head nurse and supervisor conferences on a weekly basis. Senior nurses also attend the weekly Journal Club.

Mrs. Hope Mack was elected President of the Registered Nurses Association of Nova Scotia for the second year. This is recognition of her great contributions to her profession and our congratulations are extended to her.

Mrs. Hope Mack and Miss Jean Dobson, Day Supervisor, attended the Annual Meeting of the Canadian Tuberculosis Association in Toronto and took part in the program of the Nurses Section of that organization.

Miss Madeline Spence, R.N., Director of Nursing Service, successfully completed the extension course in Nursing Unit Administration sponsored by the Canadian Nurses Association and the Canadian Hospital Association.

The Nova Scotia Sanatorium Postgraduate Course in Tuberculosis Nursing continued to attract registered nurses. However, only two nurses completed the course in 1965.

Mrs. Cecelia Pascoe and Miss Jean Dobson, Nursing Supervisors, attended the Institute on "Disaster Nursing" sponsored by the Dalhousie School of Nursing in January.

In February, the Dalhousie School of Nursing, in co-operation with the Canadian Tuberculosis Association sponsored an Institute on Tuberculosis Nursing. Over two hundred nurses attended, including a number from the Sanatorium. Mrs. Mack and Dr. Hiltz were guest participants in the program.

Seven nurses from the Dalhousie University School of Nursing spent three weeks at the Sanatorium doing field work as part of their course in Public Health Nursing. It is a privilege for us to participate in their educational experience.

Our congratulations are extended to Miss Jean Dobson who has been elected President of the Valley Branch of the Registered Nurses Association of Nova Scotia.

During the year 240 student affiliate nurses continued their four week affiliation at the Sanatorium. They came to us from the following Schools of Nursing: Aberdeen Hospital, New Glasgow; Victoria General Hospital, Halifax; Nova Scotia Hospital, Dartmouth; Halifax Infirmary, Halifax; Children's Hospital, Halifax; Payzant Memorial Hospital, Windsor; and the Yarmouth General Hospital, Yarmouth.

Our School for Nursing Assistants has been in operation for seventeen years and was the first such school to be established in Nova Scotia. It offers a twelve month course for applicants with a minimum of Grade IX standing but all of the students this year had a Grade X or better qualification before being accepted into the School.

Since 1948, the following nursing groups have received instruction here:

	1965	Total to date
Postgraduate Nurses	2	116
Affiliate Student Nurses	240	2901
Student Nursing Assistants		
Completed course	20	272
Discontinued course	17	140
Still on course	24	

The course for nursing assistants is by no means easy as indicated by the fact that out of 412 persons who started only 272 completed it and were certified. It may be of interest to outline some of the causes of failure of students to finish their studies. These are listed as follows:

NOVA SCOTIA SANATORIUM SCHOOL FOR NURSING ASSISTANTS

Percentage of Student Nursing Assistants not completing course

Cause	Total	Percentage
Unprofessional behaviour	27	6.55
Did not like nursing	26	6.31
Gave poor nursing care	23	5.58
Psychological problems	14	3.40
Marriage	11	2.67
Examination failure	7	1.70
Physical illness	7	1.70
Unknown	7	1.70
Illness at home	5	1.21
Pregnancy	5	1.21
Forgery	3	0.73
Family moved	2	0.49
Death	2	0.49
Too much education	1	0.24
SUMMARY:		
Did not complete course	140	33.98
Completed course	272	66.02

Since 1962 we have been giving a course at the Sanatorium in order to train Certified Nursing Assistants to become Operating Room Technicians. This is a six month course. Since its inception the following C.N.A.'s have received certificates indicating satisfactory completion of the course:

Sylvia Diane Eichel, C.N.A.	September, 1962
Mary Elizabeth MacNeil, C.N.A.	April, 1963
Ann Mildred McLellan, C.N.A.	March, 1964
Elizabeth Jane Fraser, C.N.A.	October, 1964
Edna Marie Doucette, C.N.A.	October, 1965

(c) Rehabilitation: Mr. Barrett, Director of Rehabilitation, attended the annual meeting of the Canadian Tuberculosis Association in Toronto and participated in its official program.

Mr. Donald Brown, Social Worker, was an assistant instructor for the course in Clinical Pastoral Training held at the Sanatorium for six weeks during the summer.

Mr. Barrett is President of the Nova Scotia Branch of the Canadian Mental Health Association. Our congratulations are extended to him for this high honour.

Mrs. Mary MacKinnon, radio operator of the Sanatorium Station SAN and part-time teacher of our patients, is on study leave at Acadia University in order to obtain her Diploma in Education. This has been made possible by a Professional Training Grant.

(d) Dietary: Miss Quinlan, Director of Dietary Services, attended the Annual Meeting of the Canadian Dietetic Association in Toronto.

(e) Laboratory: Mr. Arthur Patterson, honours student from Acadia University, continued his work here through the summer months in regard to the identification of unclassified mycobacteria—those organisms which resemble tubercle bacilli.

Miss Donna Forsyth was absent all year on a National Health Grant Bursary to complete her course in laboratory technology in Halifax. She will return to our staff later this year.

Miss Helen Morse, R.T., attended a Laboratory Workshop in Halifax for two days in October.

(f) Administrative: Miss Virginia Allen, B.Sc., Dietitian, and Carl Wagner, assistant in our Stores Department, have undertaken the course in Hospital Departmental Management provided by the Canadian Hospital Association. This is of one year duration and will extend through into 1966. This course involves much reading and homework outside of regular working hours. Both these staff members are to be commended for the giving up of their own time in order that they may learn ways of providing a better service not only in their own departments but in their relationships with other departments.

Mr. R. P. MacKenzie, Administrative Assistant, attended the annual meeting and workshop of the Maritime Hospital Association in Moncton N. B.

(g) Clinical Pastoral Training: During the summer of 1965, the Institute of Pastoral Training conducted its thirteenth annual six-week course at the Sanatorium for ministers, missionaries, deaconesses, theology students and others. Special attention is paid to mental health and the psychological aspects of illness and emotional involvements in both living and dying. Full university credits are given to those taking the course which is fully accredited by the Institute of Pastoral Care of the U.S.A. A similar course is given to Acadia University theology students during the regular academic year.

Those attending the summer course this year were:

Rev. T. A. Grew	University of Kings College
Lic. John J. Leddicote	Springfield, N. S.
Rev. Nelson H. Metcalf	Avonport, N. S.
Rev. Hedley H. Hopkins	Wolfville, N. S.
Lic. Harold W. Bentley	Margaretsville, N. S.
Rev. Wm. W. Beach	Moncton, N. B.
Mr. Ronald S. Stattard	Winnipeg, Manitoba
Lic. Robert E. Childs	Wolfville, N. S.
Lic. David H. Shaw	Wolfville, N. S.
Rev. Keith W. Mason	Port Williams, N. S.
Miss Joyce Thompson	Lancaster, N. B.
Rev. A. Parsons	Milford, N. S.
Lic. Jack W. Palmer	Wolfville, N. S.
Lic. Henry Sharam	Charlottetown, P.E.I.
Lic. Paul Crosby	Waterville, N. S.
Mr. Donald Brown, M.S.W.	Assistant Instructor, Kentville, N. S.
Rev. Howard Taylor	Assistant Director, Canning, N. S.
Rev. Charles Taylor	Director, Wolfville, N. S.

Miscellaneous:

The following employees were retired on superannuation:

1. Mrs. Leonora Spencer, Nursing Instructor, January 1st, after 20 years' service with the Department of Public Health and the Nova Scotia Sanatorium
2. Mrs. Lydia Morton, Charge Nurse, July 26th, after 15 years' service at the Sanatorium
3. Mrs. Mabel Hilchie, waitress, September 30th, after 13 years' service
4. Mrs. Ruby Winnifred Zwicker, Laundress, December 15th, after 15 years' service

Our very best wishes are extended to them for many years of happiness in retirement.

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During 1965, the following papers were published by staff members:

1. "Hytrast: A New Contrast Medium for Bronchography"; Drs. F. J. Misener, J. J. Quinlan, and J. E. Hiltz, Canadian Medical Association Journal, March 20, 1965

2. "Emerging Patterns and Trends in Tuberculosis Treatment"; Dr. J. E. Hiltz, Canadian Journal of Public Health, March, 1965

3. "Non-Tuberculous Shoulder Disabilities in Sanatorium Patients"; Drs. E. W. Crosson and J. E. Hiltz, Canadian Medical Association Journal, May 22, 1965

4. "Dietary Treatment in Burns"; Eileen Quinlan, B.Sc., The Canadian Nurse, May, 1965

5. "Bilateral Pulmonary Resection for Tuberculosis"; Drs. J. J. Quinlan, V. D. Schaffner and J. E. Hiltz, Diseases of the Chest, October, 1965

6. "Cancer of the Lung"; Drs. J. J. Quinlan, V.D. Schaffner and J. E. Hiltz, Nova Scotia Medical Bulletin, December, 1965

7. "Co-Existing Pulmonary Tuberculosis and Bronchogenic Carcinoma; A Report of 15 Cases": Drs. H. M. Holden, J. J. Quinlan, and J. E. Hiltz, Canadian Medical Association Journal, December, 1965

8. "Dr. A. F. Miller: An Appreciation"; Dr. J. J. Quinlan, Nova Scotia Medical Bulletin, November, 1965

9. "Dr. Arthur Frederick Miller: An Appreciation"; Dr. J. E. Hiltz, Canadian Medical Association Journal, December 25, 1965

In addition, the staff of the Nova Scotia Sanatorium co-operated extensively with the author in the preparation of the following paper based on an analysis of 877 Nova Scotia Sanatorium case histories:

"Breast Cancer Following Multiple Fluoroscopies"; Dr. Ian MacKenzie, The British Journal of Cancer, Volume XIX, pg. 1, 1965

* * * * * * * * * * *

During 1965, the Sanatorium continued to provide the following special services:

1. The Tuberculosis Control Services of the Department of Public Health are centred here with the Medical Superintendent as Administrator of the Services. In addition, the Provincial Tuberculosis Index is kept in our Medical Records Department and maintained there by our staff.

2. The Sanatorium provides an x-ray film developing service for Health Unit Directors. During 1965, this involved the processing of over 12,000 standard sized films at no charge to the Health Unit concerned.

3. Our electrocardiographic service to Point Edward Hospital was continued with the interpretation of 143 tracings (Table XIV F).

4. The Nova Scotia Sanatorium provides heat for the Department of Lands and Forests Building on Exhibition Street and also heat and janitor service for the Provincial offices of the Departments of Education, Public Health, and Lands and Forests in Pavilion VI. These services are without charge to the department concerned.

5. The Nova Scotia Sanatorium Fire Department and its equipment responds to alarms in the Kentville area to meet special emergencies.

6. The facilities of Miller Hall continue to be used for community meetings by scientific, professional, and paramedical groups.

We consider it to be a distinct privilege to be of service to the community at large in respect to the above matters.

* * * * * * * * * *

During the year, once again, many friends of the Sanatorium remembered our patients by donations of books to our Patients' Library, records for our Radio Station SAN, money for our Patients' Comfort Fund, and by games and flowers for our bed patients. Local citizens provided transportation so that our patients might see the Apple Blossom Festival Parade and also view the countryside. The Clinical Pastoral Training students provided a picnic and drive for our high exercise patients. During the summer, Right Reverend Father Durney arranged for small groups of patients to be taken for drives each week. At Christmas time, all the churches, the Salvation Army, the Red Cross Society, the Rotary Club, the I.O.D.E., the Canadian Legion, and the Silver Cross Women of Canada remembered our patients with gifts and good wishes. A number of talented musicians came to the Sanatorium to play our electric organ or present choral selections throughout the year and carols during the Christmas Season. The Walter Callow buses took most of our patients on a two to four hour tour of the countryside during the summer. The different church groups and the I.O.D.E. continued to sponsor card parties for up-patients once a month. We have tried to thank all these persons either by mail or in our magazine, Health Rays, but in case some have been overlooked, we say another sincere "thank you" at this time.

We would particularly like to thank the officials of the Department of Public Works for their continued interest in the excellent maintenance of our buildings and grounds. Our new light standards and lights have done much to make walking and driving on our grounds safer for staff and visitors and have been very much appreciated. Our new operating room lights are also a welcome improvement. The re-organization of our underground heating systems has effected greater efficiency and considerable economy. The new windows on our West Infirmary have contributed greatly to the comfort of patients and to diminishing unwarranted heat loss. Our patients' new dining room is also very much appreciated by all. For these and a number of other important but less spectacular improvements we are grateful indeed.

To the Honourable Richard A. Donahoe, Q.C., Minister of Public Health, and to his Deputy, Dr. J. S. Robertson, I extend my personal thanks and sincere appreciation for kindly consideration and advice freely given in all matters referred to them. In closing this report, I wish to pay high tribute to the staff of the Sanatorium with whom I consider it a great privilege to work. Without fear of contradiction, I can say that there is not an institution in Canada with a better trained, conscientious, stable, and more capable staff on the whole. The equipment with which we work is also excellent. Our only real lack is for a modern physical plant in which to house our patients, staff, and this equipment. Our patients often come to us from one of the new general hospitals which are now found everywhere in Nova Scotia. It is sometimes difficult for them to adjust to facilities here which were constructed in 1904 and 1917 or even our East Infirmary which is now over 35 years old. We trust that better times are coming for our tuberculous patients whose periods of in-hospital treatment are measured in months rather than days as is the case in general hospitals. Indeed, many patients are in the latter for such short periods that they hardly notice their surroundings. Such is not the case in respect to patients undergoing treatment for a chronic illness.

J. E. HILTZ, M.D.,
Medical Superintendent

December 31, 1965

STATISTICAL REPORT

FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1965

Table I

	Calendar Year 1963	Calendar Year 1964	Calendar Year 1965
Number of patients discharged since November 30, 1904	11,814	12,042	12,276
Number of patients in residence at first of year	139	166	143
Number of patients admitted during the year	226	200	226
Number of patients admitted for review during year	2	0	3
Number of patients readmitted* during the year	70	85	85
Number of patients readmitted* for review during year	20	12	19
Total number of patients treated during year	457	463	476
Number of patients discharged for first time during year	203	228	231
Number of readmitted* patients discharged during year	66	80	89
Number of review patients discharged during year	22	12	21
Total number of patients discharged during year	291	320	341
Number of patients in residence on last day of year	166	143	135
Number of patient days treatment	63,904	56,314	54,191
Number of patients days treatment, nontuberculous patients (included above)	2,102	4,116	3,613**

* Readmitted means previously treated at the Nova Scotia Sanatorium

** 3613 days do not include 326 days hospital service to 85 sick staff—compared to 4116 days in 1964 which did not include 376 days hospital care to 92 sick staff.

Table II — **ADMISSIONS DURING YEAR—SOURCE OF PATIENTS**
(Dominion Bureau of Statistics Classification)

First admission to any institution	147	175	194
Readmission, previously treated at any institution	69	75	94
Transfer direct from another institution	75	32	20
To continue treatment (temporarily released)	5	3	3
Review only (evaluation—no treatment)	22	12	22
Total	318	297	333

Table III (a)

DIAGNOSIS OF ALL PATIENTS DISCHARGED DURING YEAR

(Review cases are excluded)

	First Admissions	Readmissions*
Pulmonary tuberculosis—reinfection type	115 or 49.7%	69 or 77.5%
Pulmonary tuberculosis—primary active	10 or 4.3%	
Pleurisy with effusion—suspect tuberculosis	4 or 1.7%	1 or 1.1%
Tuberculosis of ankle		1 or 1.1%
Tuberculosis of hip		1 or 1.1%
Tuberculosis of kidney	4 or 1.7%	
Tuberculosis of lymph nodes	5 or 2.2%	1 or 1.1%
Tuberculosis of meninges	1 or .4%	
Tuberculosis of spine	2 or .9%	1 or 1.1%
Pulmonary disease—nontuberculous	90 or 39.0%	15 or 16.9%
Total	231 or 100%	89 or 100%

Table III (b)

FINAL PRINCIPAL TUBERCULOSIS DIAGNOSIS OF REVIEW CASES DISCHARGED DURING THE YEAR

	Active	Inactive
Tuberculosis of Lung:		
Minimal	3	6
Moderately advanced		8
Far advanced	1	2
Other Tuberculosis		1
Total	4	17

* Previously treated at this institution

Table III (c)

COMPLICATIONS OF PATIENTS DISCHARGED
Calendar Year 1965

(Excludes all principal diagnosis shown in Tables IIIa, IIIb, and IVa)

A. TUBERCULOUS CONDITIONS:

Adrenal glands	1
Bones & Joints:	
Hip	2
Knee	1
Spine	4
*Bronchiectasis	38
*Bronchopleural fistula	11
*Empyema	8
Genitourinary	7
Lymphadenitis	2
Meningitis	1
Pericarditis CV	1
*Pleurisy with effusion	7
Skin	2
*Tracheobronchitis	4
Total	89

B. CONDITIONS OTHER THAN TUBERCULOSIS:

Abscess, perianal		1
Acidosis, metabolic		1
Acne, vulgaris		1
Anaemia, iron deficiency	CV	15
Ankylosis of joint		1
Appendicitis, chronic		1
Arteriosclerosis	CV	8
Arthritis, gouty		1
Arthritis, osteo		9
Arthritis, rheumatoid		4
*Asthma, bronchial		10
*Atelectasis		2
Auricular fibrillation	CV	6
*Bronchitis		3
Bursitis		2
Cataract		4
Celiac Disease		1
Cellulitis		2
Cerebral accident	CV	3
Cerebral palsy		1
Cerebral vascular deficiency	CV	1
Cholelithiasis		1
Conjunctivitis		2
Cor pulmonale	CV	3
Cushing's syndrome		1
Cyst, sebaceous		1
Cystitis		1
Cystocele		1

* indicates diseases of chest other than heart
CV indicates diseases of heart and blood vessels

Dermatitis		4
Diabetes Mellitus		25
Diverticulosis of colon		1
Diverticulosis of esophagus		1
Dupuytren's contracture		1
*Emphysema, generalized of lung		6
*Empyema		1
Epilepsy		1
*Fibrosis of lung due to radiation		1
*Fibrosis of lung, cause undetermined		6
*Fibrothorax		2
Fissure in ano		1
Fistula in ano		1
Fracture of humerus		1
Fracture of metatarsus		1
Furunculosis		1
Glaucoma		1
Glomerulonephritis		1
Haemorrhoids		3
Hallux valgus		1
Heart disease, congenital	CV	1
Heart disease, congestive	CV	1
Heart disease, coronary	CV	22
Hemiparesis		3
Hepatitis, infectious		1
Hernia, hiatus		1
Hernia, inguinal		7
Herpes zoster		2
Hydrocele		4
Hyperplasia of breast, cystic		1

Hypertensive cardiovascular disease....CV	10
Infarction, acute myocardial....CV	4
*Infarction, pulmonary	1
Kyphosis, dorsal	2
Lipoma	2
Marie Strumpell's Disease	1
Myocarditis....CV	1
Neoplasm, benign, breast	1
Neoplasm, benign, skin	6
Neoplasm, malignant, primary breast	3
Neoplasm, malignant, primary colon	1
Neoplasm, malignant, primary epiglottis	1
*Neoplasm, malignant, primary lung	5
Neoplasm, malignant, primary stomach	1
Obesity	1
Obstruction of bowel	1
Osteoporosis, senile	2
Osteomyelitis	1
Otitis media, chronic	1
Parkinson's syndrome	1
Perforation of nasal septum	2
Pityriasis rosea	1
*Pleurisy with effusion	2
*Pneumonia, broncho	6
*Pneumonia, lobar	3
*Pneumonitis	11
*Pneumothorax, spontaneous	3
Prostatic hypertrophy	4
Psoriasis	1
Psychiatric conditions:	
Alcoholism	2
Anxiety state	1
Chronic brain syndrome	2
Depression	6
Mental defective	1
Mental retardation	4
Personality disorder	4
Psychoneurosis	1
Psychotic depression	1
Reactive depression	1
Schizophrenia	5
Senile psychosis	1
Pyelonephritis	1
Renal colic	1
Senility	2
Shoulder-Hand syndrome	3
Stenosis of aorta....CV	2
Thoracic outlet syndrome	1
Thrombophlebitis....CV	1
Tonsillitis	2
Ulcer, decubitis	1
Ulcer, gastric	2
Urethral stricture	1
Varicose veins....CV	8

Table IV (a)

NON TUBERCULOUS PATIENTS—DIAGNOSIS ON DISCHARGE

(includes sick staff admitted to other than sick staff rooms for care of minor illnesses)

	First Admissions	Readmissions*
Abscess, lung	2	
Appendicitis	2	
Asthma, bronchial	2	
Bronchiectasis, nontuberculous	5	2
Bronchitis, chronic	1	
Carcinoma, bronchogenic	6	3
Carcinoma, lung secondary, primary kidney	1	
Carcinoma, lung secondary, primary vagina	1	
Carcinoma, lung secondary, primary unknown	1	
Cyst, pleural		1
Cyst, pulmonary	1	
Cystic disease of lung	5	1
Diverticulum of esophagus	1	
Fibrosis of lung	6	
Fracture of ribs	3	
Infarction, pulmonary	1	1
Osteochondritis	1	
Osteochondritis juvenilis lumborum	1	
Penetrating wound of chest	1	
Periateritis nodosa		1
Pleurisy with effusion, nontuberculous	1	1
Pneumonia, broncho	8	3
Pneumonia, lobar	5	
Pneumonitis	11	
Sarcoidosis, pulmonary	5	
Silicosis	1	
Spontaneous pneumothorax	1	
Tumour, mediastinal	1	
Tuberculin convertor		1
No evidence of significant disease	14	1
No diagnosis	2	
TOTAL	90	15

* Previously treated at this institution

Table IV (b)

NON TUBERCULOUS PATIENTS DISCHARGED—YEAR 1965

Health Unit referring case

Health Unit	First Admissions	Readmissions*
Atlantic	4	
Cape Breton—North	1	
Cape Breton—South	1	
Cobequid	5	
Fundy	46	7
Halifax City	2	
Lunenburg-Queens	8	
Northumberland	12	4
Western	11	4
ALL UNITS	90	15

Table V

DISCHARGE CONDITION OF PATIENTS WITH TUBERCULOSIS ALL FORMS

(Review cases excluded)

Calendar Year 1965

	First Admissions	Readmissions*
Inactive	16 or 11.3%	28 or 37.9%
Quiescent		3 or 4.0
Active improved	109 or 77.3	33 or 44.6
Active unimproved	10 or 7.1	5 or 6.8
Activity undetermined		
Died	6 or 4.3	5 or 6.8
ALL DISCHARGES	141 or 100%	74 or 100%

* Previously treated at this institution

Table VI (a)

TYPES OF DISCHARGE OF PATIENTS WITH TUBERCULOSIS—ALL FORMS

First Admissions

	Calendar Year 1965			Calendar Year 1964	Calendar Year 1963
	Male	Female	Total		
On Medical Advice to home (without drugs)	10 or 11.6%	7 or 12.7%	17 or 12.1%	12 or 8.3%	25 or 17.0%
To continue drugs at home	43 or 50.0	30 or 54.5	73 or 51.8	83 or 57.2	74 or 50.3
Transfer to other institution	11 or 12.8	5 or 9.1	16 or 11.3	15 or 10.3	18 or 12.2
Against medical advice	17 or 19.8	9 or 16.4	26 or 18.4	19 or 13.1	14 or 9.5
Misconduct	3 or 3.5	0 or 0.0	3 or 2.1	2 or 1.4	6 or 4.1
Died	2 or 2.3	4 or 7.3	6 or 4.2	14 or 9.7	10 or 6.8
TOTAL	86 or 100%	55 or 100%	141 or 100%	145 or 100%	147 or 100%

Table VI (b)

READMISSIONS*

	Calendar Year 1965			Calendar Year 1964	Calendar Year 1963
	Male	Female	Total		
On Medical Advice to home (without drugs)	35 or 61.4%	10 or 58.8%	45 or 60.8%	34 or 45.3%	29 or 52.7%
To continue drugs at home	8 or 14.0	3 or 17.6	11 or 14.9	22 or 29.3	18 or 32.7
Transfer to other institution	1 or 1.8	2 or 11.8	3 or 4.1	2 or 2.6	2 or 3.7
Against medical advice	5 or 8.8	2 or 11.8	7 or 9.5	7 or 9.3	2 or 3.7
Misconduct	3 or 5.3	0 or 0.0	3 or 4.1	0 or 0.0	0 or 0.0
Died	5 or 8.8	0 or 0.0	5 or 6.8	10 or 13.3	4 or 7.2
TOTAL	57 or 100%	17 or 100%	74 or 100%	75 or 100%	55 or 100%

* Previously treated at this institution

Table VI (c) TYPE OF DISCHARGE OF PATIENTS—TUBERCULOSIS—ALL FORMS

All Discharges—Admissions and Readmissions*

(Review cases excluded)

	Calendar Year 1965	Calendar Year 1964	Calendar Year 1963	Calendar Year 1962
On Medical Advice to home (without drugs)	62 or 28.8%	46 or 20.9%	54 or 26.8%	38 or 17.5%
To continue drugs at home	84 or 39.1	105 or 47.7	92 or 45.5	109 or 50.2
Transfer to other institution	19 or 8.8	17 or 7.7	20 or 9.9	16 or 7.4
Against medical advice	33 or 15.3	26 or 11.8	16 or 7.9	25 or 11.5
Misconduct	6 or 2.8	2 or 0.9	6 or 3.0	11 or 5.1
Died	11 or 5.1	24 or 10.9	14 or 6.9	18 or 8.3
TOTAL	215 or 100%	220 or 100%	202 or 100%	217 or 100%

Table VI (d) IRREGULAR DISCHARGES TUBERCULOSIS—ALL FORMS—AGE GROUPS**

Age Groups	Calendar Year 1965				1965 Total and percentage of all discharges in same age group	1964 Total and percentage of all discharges in same age group
	First Admissions			Readmissions*		
	Males	Females	Total	Total		
0– 9	0 or 0.0%	0 or 0.0%	0 or 0.0%	0 or 0.0%	0 or 0.0%	2 or 18.3%
10–19	0 or 0.0	0 or 0.0	0 or 0.0	1 or 100	1 or 16.6	3 or 23.1
20–29	4 or 44.5	1 or 7.6	5 or 22.8	2 or 100	7 or 29.2	7 or 31.8
30–39	5 or 23.8	5 or 50.0	10 or 32.3	2 or 22.2	12 or 30.0	5 or 15.1
40–49	5 or 38.5	2 or 18.2	7 or 30.4	2 or 10.0	9 or 20.9	6 or 13.9
50–59	2 or 20.0	1 or 20.0	3 or 20.0	2 or 10.0	5 or 14.3	5 or 11.1
60+	4 or 19.0	0 or 0.0	4 or 12.1	1 or 4.5	5 or 9.1	0 or 0.0
All Ages	20 or 23.3%	9 or 16.7%	29 or 20.3%	10 or 13.5%	39 or 18.1%	28 or 12.7%

* Previous treated at this institution

** Against medical advice and for misconduct (percentage refers to ratio of irregular discharges to total number of discharges in that age group)

Table VI (e)

IRREGULAR DISCHARGES

AMERICAN THORACIC SOCIETY FORMULA

Total number of patients discharged Jan. 1 to Dec. 31, 1965		341
Total deductions		156
(a) Deaths	15	
(b) Non Tb. discharges	101	
(c) Transfer to other hospitals for continuation of Tb. treatment	19	
(d) Discharges of patients admitted for observation, diagnostic procedures, special examinations, or follow-up and for whom less than 30 days' hospitalization was anticipated by original intent	21	
(e) Discharges of court order patients from locked wards	0	
Net Tb. discharges		185
Total irregular discharges		39
(a) Against medical advice (disease unstable: 14)	33	
(b) Disciplinary (disease unstable: 3)	6	
Per cent irregular discharges 1965 (item 4 + 8 x 100)		21.1%
Per cent irregular discharges 1964	15.5	
Per cent irregular discharges 1963	13.1	
Per cent irregular discharges 1962	19.7	
Per cent irregular discharges 1961	21.8	
Per cent irregular discharges 1960	19.2	
Per cent irregular discharges 1959	39.5	

Table VII

ADMISSION DIAGNOSIS OF PATIENTS DISCHARGED

(Pulmonary tuberculosis only)

Review cases excluded

	FIRST ADMISSIONS						Readmissions*
	Calendar Year 1944			Fiscal years ending in 1945		1945	Calendar Year 1945
	Males	Females	Total	Total	Total	Total	Total
Primary	8 or 10.5%	2 or 4.1%	10 or 8.0%				
Minimal	17 or 22.4	16 or 32.6	33 or 26.4	21 or 11.0%	42 or 12.8	27 or 10.0	15 or 21.8%
Moderately advanced	26 or 34.2	23 or 47.0	49 or 39.2	94 or 49.5	148 or 45.1	52 or 19.2	31 or 44.9
Far advanced	23 or 30.3	8 or 16.3	31 or 24.8	75 or 39.5	138 or 42.1	192 or 70.8	23 or 33.3
Silicotuberculosis	2 or 2.6		2 or 1.6				
TOTAL	76 or 100%	49 or 100%	125 or 100%	190 or 100%	328 or 100%	271 or 100%	69 or 100%

* Previously treated at this institution.

Table VIII (a)

AGES AT TIME OF ADMISSION OF PATIENTS DISCHARGED DURING 1965

Pulmonary Tuberculosis only—Primary and Reinfection Type

(Review cases excluded)

	FIRST ADMISSIONS						Readmissions*
	Calendar Year 1965			Fiscal years ending in 1955	1945	1935	Calendar Year 1965
	Males	Females	Total	Total	Total	Total	Total
0– 9	8	2	10	2	0	0	0
10–19	4	1	5	27	28	45	0
20–29	7	12	19	72	154	139	2
30–39	18	10	28	37	75	52	8
40–49	12	9	21	30	46	21	19
50–49	8	5	13	14	14	8	20
60+	19	10	29	8	11	6	20
Total	76	49	125	190	328	271	69
Average ages	41.9	41.3	41.7	31.3	31.9	28.6	52.0
Average ages 1964	46.0	34.2	41.1				50.9
Average ages 1963	45.9	40.4	43.7				51.7

Table VIII (b)

AGE GROUPS AND SEX OF PATIENTS IN RESIDENCE

(Actual age on last day of year)

Tuberculosis—All forms

(Review cases excluded)

Age Group	On December 31, 1965					On December 31, 1964		On December 31, 1963	
	Male	Female	Total	Percentage Actual	Percentage Cumulative	Total	Cumulative Percentage	Total	Cumulative Percentage
0– 4	1	1	2	1.6%	1.6%	5	3.8%	10	6.2%
5– 9	1	2	3	2.4	4.0	7	9.1	5	9.3
10–14	0	2	2	1.6	5.6	0	9.1	6	13.0
15–19	2	3	5	3.9	9.5	5	12.9	5	16.1
20–29	3	4	7	5.5	15.0	11	21.2	17	26.7
30–39	7	14	21	16.5	31.5	20	36.4	26	43.0
40–49	11	9	20	15.7	47.2	27	56.8	26	59.3
50–59	22	8	30	23.6	70.8	20	71.9	29	77.5
60–69	14	5	19	15.0	85.8	22	88.6	15	86.9
70–79	8	4	12	9.5	95.3	10	96.2	17	97.5
80+	4	2	5	4.7	100%	5	100%	4	100%
All Ages	73	54	127	100%		132		160	

Table VIII (c)

EXTENT OF DISEASE AND SEX OF PATIENTS IN RESIDENCE

Tuberculosis—All Forms

(Includes First Admissions and Readmissions, excluding review)

December 31, 1965

Extent of Disease	Males	Females	Total	Percentage
Primary	3	3	6	4.7
Minimal	5	12	17	13.4
Moderately advanced	30	15	45	35.4
Far advanced	31	22	53	41.7
Other tuberculosis	4	2	6	4.7
All Diagnosis	73	54	127	100%

Table VIII (d)

AGE GROUPS AND PRINCIPAL TUBERCULOSIS DIAGNOSIS OF PATIENTS IN RESIDENCE

Age Group	December 31, 1965						Dec. 31 1964 Total
	Primary	Minimal	Mod. Advanced	Far Advanced	Non Respiratory	Total	
0—4	1	1	0	0	0	2	5
5—9	2	0	0	0	1	3	7
10—14	1	1	0	0	0	2	0
15—19	2	0	2	1	0	5	5
20—29	0	1	3	3	0	7	11
30—39	0	3	7	11	0	21	20
40—49	0	2	9	8	1	20	27
50—59	0	3	11	13	3	30	20
60—69	0	3	6	9	1	19	22
70—79	0	1	4	7	0	12	10
80+	0	2	3	1	0	6	5
All Ages	6	17	45	53	6	127	132

Table VIII (c)

AGE GROUPS AND SEX OF PATIENTS ADMITTED AND READMITTED DURING THE YEAR

Tuberculosis—All Forms

(Review cases excluded)

Age Group	Calendar Year 1965				1964		1963	
	Male	Female	Total	Percentage	Total	Percentage	Total	Percentage
0– 4	1	2	3	1.4	5	2.6	10	4.4
5– 9	1	1	2	1.0	6	3.2	8	3.5
10–14	0	2	2	1.0	0	0.0	8	3.5
15–19	3	3	6	2.9	6	3.2	10	4.4
20–29	11	12	23	11.0	17	9.0	31	13.6
30–39	22	12	34	16.2	26	13.8	42	18.5
40–49	22	15	37	17.7	41	21.7	42	18.5
50–59	35	13	48	23.0	39	20.6	32	14.1
60–69	21	10	31	14.8	29	15.3	17	7.5
70–79	7	10	17	8.1	14	7.4	19	8.4
80+	5	1	6	2.9	6	3.2	8	3.5
All Ages	128	81	209	100%	189	100%	227	100%

Table IX

RELIGION OF PATIENTS DISCHARGED
Tuberculosis—All Forms
(Review cases excluded)
Calendar Year 1965

	First Admissions and Readmissions*
Anglican	29 or 13.4%
Baptist	47 or 21.8
Catholic, Roman	76 or 35.4
Christian Church	1 or .5
Greek Orthodox	1 or .5
Hebrew	1 or .5
Jehovah Witness	1 or .5
Lutheran	1 or .5
Pentecostal	1 or .5
Presbyterian	16 or 7.4
Salvation Army	3 or 1.4
Seven Day Adventist	1 or .5
United Church	35 or 16.2
No religion	2 or .9
All Discharges	215 or 100%

Table X

RESIDENCE OF PATIENTS DISCHARGED
Tuberculosis—All Forms
(Review cases excluded)
Calendar Year 1965

	First Admissions			Readmissions*		
	Males	Females	Total	Males	Females	Total
Annapolis Co.	2	2	4	2	4	6
Antigonish Co.	8	0	8	1	0	1
Cape Breton Co.	6	5	11	3	1	4
Colchester Co.	3	6	9	4	0	4
Cumberland Co.	1	3	4	1	0	1
Digby Co.	11	7	18	5	1	6
Guysborough Co.	2	2	4	3	0	3
Halifax City	11	3	14	0	1	1
Halifax Co.	10	9	19	10	1	11
Hants County	4	2	6	1	1	2
Inverness Co.	1	7	8	1	0	1
Kings County	4	2	6	15	4	19
Lunenburg Co.	3	0	3	1	1	2
Pictou Co.	6	4	10	5	0	5
Queens County	0	0	0	1	0	1
Richmond Co.	1	0	1	1	0	1
Shelburne Co.	2	2	4	2	0	2
Victoria Co.	1	0	1	0	0	0
Yarmouth Co.	8	1	9	1	3	4
Out of Province	2	0	2	0	0	0
TOTAL	86	55	141	57	17	74

* Previously treated at this institution

Table XI

SURGICAL PROCEDURES

Calendar Year 1965

A.	Artificial pneumoperitoneum:		
	Number of patients		1
	Number of refills		8
	Artificial pneumothorax (extrapleural)		
	Number of patients		3
	Number of refills		42
B.	Primary Thoracoplasty		1
C.	Pulmonary Resections		62
	Indications: (including biopsy* for diagnostic purposes)		
	Carcinoma, bronchogenic	5*	
	Emphysema, bullous	4	
	Infarction, pulmonary	1	
	Sarcoidosis	2*	
	Tuberculosis	50	
	For Pulmonary Tuberculosis: Type of operation		
	Pneumonectomy	1	
	Lobectomy and Segmentectomy	3	
	Lobectomy	19	
	Segmentectomy, multiple	4	
	Segmentectomy	10	
	Wedge resection, multiple	1	
	Wedge resection	12	
	Results:		
	Greatly improved	36	
	Improved	14	
	Dead	0	
	Operative Mortality (within 60 days)		0.0%**

** Based on tuberculosis cases only

Table XI D

RESECTIONAL THERAPY ON PATIENTS DISCHARGED

Pulmonary Tuberculosis only—according to extent of disease

FIRST ADMISSIONS

Extent of Disease	Calendar Year 1965			1964	1963	1962	1961
	Males	Females	Total	Total	Total	Total	Total
Minimal	6 or 35%	3 or 19%	9 or 27%	9 or 30%	6 or 25%	11 or 35%	9 or 29%
Moderately advanced	13 or 50	11 or 48	24 or 49	27 or 57	34 or 53	28 or 48	11 or 18
Far advanced	7 or 30	2 or 25	9 or 29	15 or 47	9 or 26	13 or 32	5 or 11
TOTAL	26 or 39%	16 or 34%	42 or 37%	51 or 46%	49 or 40%	52 or 40%	25 or 18%
Bilateral operations	2	0	2	2	8	7	0

READMISSIONS*

Extent of Disease	Calendar Year 1965			1964	1963	1962	1961
	Males	Females	Total	Total	Total	Total	Total
Minimal	1 or 8%	1 or 12%	2 or 13%	3 or 16%	0 or 0%	0 or 0%	1 or 17%
Moderately advanced	4 or 18	0 or 0	4 or 13	4 or 18	3 or 18	9 or 32	8 or 17
Far advanced	2 or 11	0 or 0	2 or 9	4 or 13	3 or 14	3 or 8	2 or 6
TOTAL	7 or 13%	1 or 6%	8 or 12%	11 or 15%	6 or 12%	12 or 18%	11 or 13%
Bilateral operations	0	0	0	1	1	0	0

* Previously treated at this institution

E. Sundry Surgical Procedures—Major:

Appendicectomy	8
Colporrhaphy	1
Decortication, pleural	1
Delivery	1
Excision of chest sinus	1
Extraperiosteal plombage of lung	5
Gastroenterostomy and jejunojejunostomy	1
Hysterectomy and appendicectomy	1
Mastectomy, radical	2
Nephrectomy	1
Resection of rib	2
Schede, modified	2
Spinal fusion	1
Thoracotomy	2
Transurethral resection	1
Tracheostomy	1

F. Sundry Surgical Procedures—Minor:

Application of cast	3
Aspiration of pleural fluid	58
Biopsy, pleural tissue	11
Biopsy, scalene node	9
Biopsy, skin	1
Blood transfusion	296
Excision of cyst	5
Excision of desmoid tumour	1
Excision of lipoma	1
Excision of mass from scrotum	1
Excision of mass from neck	1
Excision of mole	4
Excision of papilloma	8
Excision of polyp	1
Incision and Drainage of abscess	2
Nerve block	2
Suturing of wound	4
Thoracostomy	1
Unguectomy	6

G. Anaesthesia:

Novocaine 2%	187
Pentothal sodium	10
Pentothal sodium + ether + nitrous oxide	2
Pentothal sodium + ether + oxygen	28
Pentothal sodium + ether + cyclopropane + oxygen	52
Pontocaine 2% topical	374
Spinal	4
Xylocaine 4%	6

Table XII

X-RAY DEPARTMENT REPORT

Abdominal, flat film	11
Barium enema	8
Bones & Joints	227
Bronchograms	123
Bronchospirometry	3
Chest	4500
Cystograms	6
Dental	14

Fistula, contrast media		9
Gall Bladder		6
Gastrointestinal (complete)		27
Heart		3
Kidney-Ureter-Bladder		17
Outside films interpreted		1972
—Interpreted for Director of Tuberculosis Control, City of Halifax	718	
—Interpreted for Department of Indian and Northern Health Services	140	
—Others	1114	
Planigraphs		156
Sinus and Mastoid		4
Total		7086

3105 Out-patient x-ray examinations included in above table.

Film developing service for Department of Public Health:

Cobequid Health Unit	4935
Fundy Health Unit	2006
Northumberland Health Unit	2208
Western Health Unit	2888
All Units	12,037

Table XIII

LABORATORY REPORT

Units of Work performed:	1965	1964	1963
General Laboratory	69,199	71,711	70,629
Milk and Water Laboratory	12,581	13,483	17,831
Total Units performed in Nova Scotia Sanatorium Laboratory	81,780	85,194	88,460
Units of Work performed for the Sanatorium by Public Health, Red Cross and Biochemistry Laboratories, Halifax	7,374	6,437	5,420
Units of Work performed for the Sanatorium by:			
Pathology Laboratory, Halifax	1,064*		
Blanchard-Fraser Memorial Hospital Laboratory, Kentville	48		
Total Units of Work for Sanatorium specimens	90,266	91,631	93,880

* Surgical and autopsy specimens rated at 8 units of work for each of 133 operative specimens plus 4 complete autopsies.

Bacteriology:

Bronchoscopic specimens for tubercle bacilli:	
Concentrated cultures	283
Cerebrospinal fluid specimens for tubercle bacilli:	
Direct cultures	4
Direct smears	1
Gastric lavages for tubercle bacilli:	
Concentrated cultures	594
Concentrated smears	132

Miscellaneous specimens for tubercle bacilli:	
Concentrated cultures	310
Concentrated smears	149
Direct cultures	90
Direct smears	55
Niacin testing	75
Sputum specimens for tubercle bacilli:	
Concentrated cultures	3828
Concentrated smears	1516
Tubercle Bacilli sensitivities	156
Urines for tubercle bacilli:	
Concentrated cultures	670
Concentrated smears	298
Secondary Organisms:	
Blood cultures	10
Fungi	6
General antibiotic sensitivity tests	156
Miscellaneous	629
Sputum	246
Sterilities	70
Stool	4
Throat and Nose	621
Urine	41
Biochemistry:	
Bromsulphalein	124
Cephalin Cholesterol Flocculation	5
Collections	282
Congo Red	1
Creatinine	4
Gastric Analysis—12 hour specimen	1
Glucose	1441
Glucose Tolerance	19
Non Protein Nitrogen	125
Thymol Turbidity	21
Total Protein	7
Total Protein A/G Ratio	66
Urea Nitrogen	409
Van den Bergh	6
Cerebrospinal Fluid:	
Cell Count	4
Chlorides	1
Protein	3
Sugar	2
Faeces:	
Occult Blood	85
Ova and Parasites	11
Haematology:	
Bleeding Time	1
Collections	257
Cross Matching	17
Differential Counts	1199
Hematocrits	1499
Hemoglobin estimations	1906
L. E. Cells	15
Nasal swabs for eosinophils	9

Platelet counts	14
Partial Thromboplastin Time	33
Prothrombins	99
Red Blood Cell count	16
Reticulocyte count	12
Sedimentation rates	1499
White Blood Cell count	1793
Kidney Function Tests:	
Concentration	3
Dilution	1
Phenolsulfonphthalein	1
Milk and Water Examinations:	
Samples tested for coliform organisms:	
Chocolate Dairy Drinks	111
Cream	66
Ice Cream Mix	30
Milks	531
Waters	1321
Samples tested for phosphatase:	
Chocolate Dairy Drinks	108
Cream	63
Ice Cream Mix	30
Milks	511
Other tests:	
Plate counts, restaurant and taverns	1031
Resazurins	147
Pleural Fluid:	
Individual Constituents	3
Urines:	
Individual Constituents	181
Routine urinalysis	1752
Trichomonas smears	40
Tests Performed in the Biochemistry Department, V. G. Hospital:	
Acid phosphatase	1
Alkaline phosphatase	58
Bicarbonate	24
Calcium	34
Chlorides	27
Cholesterol	87
Electrophoresis, protein differential	26
17 Keto-Steroids	4
Phosphorus	21
Potassium	31
Protein Bound Iodine	19
Sodium	29
Thymol	2
Total Protein, A/G ratio	3
Transaminase	21
Uric Acid	58
Urine for pregnancy	5
Cerebrospinal Fluid:	
Chlorides	1
Protein	2
Sugar	1

Tests Performed in the Public Health Laboratory, Halifax:

Bacteriology:

Blood culture	4
Fungi culture	1
General sensitivity	1
Gonococcus smears	55
Miscellaneous cultures	2
Nose and Throat culture	1
Stolls for Enteric	8
Urine culture	1
Widal	2

Cerebrospinal Fluid:

Cell count	1
Colloidal Mastic	3

Haematology:

Bone marrow	1
Differentials	2
L. E. Cells	15

Pathology:

Papanicolaou smears	486

Serology:

Kahn	1
Latex Fixation	15
Paul Bunnell	4
Rose Waaler	3
V.D.R.L.	527
Wassermann, blood	1
Wassermann, C.S.F.	4

Tests performed in the Red Cross Laboratory:

Blood Group, Cross Match, Rh, for surgery	455
Rh antibody titre	2

Tests performed in the Blanchard Fraser Memorial Hospital Laboratory:

Cross Match of blood	12

Note:

We continue to be indebted to the Administrator of Laboratory Services of the Department of Public Health and his staff and to the Red Cross Blood Transfusion Service for invaluable assistance rendered throughout the year.

Table XIV

SPECIAL SERVICES

			1965	1964
A.	Outpatient Department:			
(1)	Total visits to chest clinic		2996	3077
	Ex-patients	699		
	Staff	1193		
	Others	1104		
(2)	Number of old cases reactivated		3	3
(3)	Number of newly diagnosed cases		2	4

(4)	B.C.G. Clinic:			
	Total vaccinations		65	38
	Nurses—graduate	1		
	student	0		
	others	55		
	Others hospital personnel	0		
	Adults and children—contacts	0		
	Adults and children—not contacts	9		
B.	Bronchoscopy Service:			
	Bronchoscopy examinations		208	231
C.	Physical Therapy Service:			
(1)	Treatments			
	Exercise—active and passive		7364	4508
	Massage		870	1053
	Infra red light therapy		2436	796
	Short wave therapy		1780	402
	Steam packs		785	517
	Wax baths		689	584
	Ultra sonic muscle stimulation		1569	
	Intermittent positive pressure breathing		1577	2092
	Postural drainage		936	291
(2)	Diagnostic Prodecures:			
	Bronchospirometry		3	
	Electrocardiograms		280	240
	Pulmonary Function tests		91	

D. Psychiatric Service:	Patients	Visits
Service by Psychiatrists:		
To Psychotics	4	4
Psychoneurotics	20	43
Personality Disorders	7	11
Brain Disorders	1	1
Mental Deficiency	3	6
No Psychiatric Diagnosis	1	1
Situational Adjustment Reactions	10	13
Medical Consultation only	1	1
	49	80
Psychiatric Lecture Series to Nurses-in-training		12

E.	Dental Services:	
	Examinations	95
	Prophylactic treatments	63
	Extractions	130
	Fillings	125
	Artificial dentures (professional service only)	21
	Prophylaxis by Dental Hygienist —patients	76
	staff	57
F.	Special Examinations:	
	Allergy tests	14
	Autopsy examinations	4
	Autopsy rate 26.6%	
	Cystoscopy	8
	Electrocardiograms interpreted for Point Edward Hospital	143
	Esophagoscopy	1
	Injection of joint	14
	Lumbar puncture	5
	Pelvic examinations	41
	Prenatal examinations	6
	Sigmoidoscopy	2
	Sternal puncture	7

Table XV

SPONSORSHIP OF PATIENTS HOSPITALIZED

	1963	1964	1965
Department of National Defence —Army	2	0	0
Navy	0	0	2
Air Force	1	3	2
Department of National Health & Welfare, Medical Services:			
(a) Immigration Medical Service	0	1	0
(b) Indian and Northern Health Services	11	6	9
(c) Sick Mariners Service	3	1	3
Department of Veterans Affairs:	25	21	18
Reciprocal Agreement:			
(a) with Ontario	1	1	0
(b) with New Brunswick	0	0	0
(c) with Prince Edward Island	0	0	0
(d) with private shipping company	0	0	1
Department of Public Health of Nova Scotia	414	430	441
Total	457	463	476

Seventeenth Annual Report

OF

Prince Edward Hospital

NOVA SCOTIA DEPARTMENT OF PUBLIC HEALTH

SYDNEY, NOVA SCOTIA

FOR THE CALENDAR YEAR
ENDING DECEMBER 31, 1965

HONOURABLE RICHARD A. DONAHOE

Minister of Public Health

Doctor J. S. Robertson
Deputy Minister

Doctor J. E. Hiltz
Administrator of Tuberculosis Control Services

MEDICAL STAFF

Medical Superintendent	Dr. D. S. Robb
Staff Physicians	Dr. T. Krzyski
	Dr. D. M. Muir
Consultants	Dr. D. B. Archibald—Urology
	Dr. W. MacIsaac—Bronchoscopy
Courtesy Consultants	Dr. H. R. Corbett—Radiology
	Dr. E. C. McDonagh—Psychiatry
	Dr. R. Mathieson—Pathology
	Dr. H. Tremblett—Pathology
	Dr. A. W. Gyorfi—Pathology
	Dr. H. M. Holden—Electrocardiology

NURSING STAFF

Director of Nursing	Miss Katherine MacKenzie
Asst. Director of Nursing	Mrs. Flora MacDonald
Head of Teaching Department	Mrs. Winnifred Protheroe
O. R. Supervisor	Miss Helen Chiasson
Evening Supervisor	Miss Margaret Bates
Night Supervisor	Mrs. Edna MacDougall
Relief Supervisor	Miss Helen MacKenzie
Head Nurse —Ward A	Miss Theresa Bisson
—Ward B	Mrs. Irene Pierrynowski
—Ward C	Mrs. Elizabeth Reid
—Ward D	Mrs. Lenore Lawley

ADMINISTRATIVE AND TECHNICAL STAFF

Medical Superintendent	Dr. D. S. Robb
Chief Clerk	Mrs. Margaret MacKenzie
Stores Supervisor	Mrs. Isobel MacPherson
Rehabilitation Supervisor	Mr. James MacDougall
X-Ray Technician	Mrs. Ada O'Callaghan
Laboratory Technician	Miss Margaret Lamond
Dietitian	Mrs. Edith Burchell
Housekeeper	Mrs. Greta MacDougall
Medical Records	Miss Vivian Fraser

ANNUAL REPORT OF POINT EDWARD HOSPITAL

—1965—

FUNCTION:

Point Edward Hospital is operated by the Nova Scotia Department of Public Health as a hospital for the diagnosis and treatment of persons suffering from tuberculous disease, for the protection of the public by the isolation of such persons during the infectious stage of their disease, for the provision of in-patient and out-patient diagnostic services for the evaluation of the activity of cases of suspected tuberculosis or other diseases simulating tuberculosis.

FACILITIES:

The hospital was constructed for the Navy during World War II, and was leased to the Province when no longer required by the Department of National Defence or by the Department of Veterans' Affairs. It was opened as a Tuberculosis Hospital on January 14, 1949, at a time when the demand for active treatment beds for tuberculosis was at a high level. The hospital is located just across the harbour from Sydney, seven miles by road, beside the Point Edward Naval Base. The plant includes a hospital building, now rated as 152 bed capacity, but at one time overcrowded with 184 beds, and residences for nurses, for domestic staff, and apartments for medical staff. All buildings were of "temporary" wartime construction. We are dependent upon "the base" for steam heat, which is purchased along with water and electricity. Outside maintenance has been the responsibility of the Navy, but with the turning over of the former Naval Base to the Department of Transport, outside maintenance will become the responsibility of the Nova Scotia Department of Public Works, while inside maintenance responsibility will continue to be shared by the Department of Public Works and the Department of Public Health.

TUBERCULOSIS TRENDS:

In the field of Tuberculosis treatment, 1965 was notable chiefly because of the continent-wide up-swing in the number of new active cases discovered, and in the number of reactivations. Unfortunately, this appears to represent a resurgence of the disease and is not merely a reflection of greater efforts at case finding. It is but another reminder that the battle against Tuberculosis is not yet won, and that only by maintaining a vigorous attack on the enemy can we hope to achieve the goal of a tuberculosis-free community.

ADMISSIONS FOR TB:

The continent-wide up-swing in the number of new active cases of Tb. was apparent in Nova Scotia, and was evidenced at Point Edward Hospital by an increase in the number of "first admissions" for tuberculosis, from 61 in 1964 to 80 in 1965, and in the number of "total admissions" from 149 to 176, or in the number of "total patients under care" during the year from 267 to 305. Statistical analysis of admissions may be found in appended Tables 2, 3 and 4.

ADMISSIONS FOR NON-TBC CONDITIONS:

Forty patients were referred in to hospital for investigation of conditions which proved upon study to be non-tuberculous. These included chronic bronchitis and emphysema, bronchiectasis, staphylococcal pneumonia, various broncho-pneumonias and pneumonitis, five cases of cancer of the lung, and so forth. Details may be found in table 3-B. In addition, patients found to have tuberculosis presented many complications which also required treatment. In an analysis of tuberculous patients discharged, associated tuberculous complications are listed in Table 14, and non-Tbc complications in Table 15.

SILICO TUBERCULOSIS:

In a coal-mining community numerous cases of pneumoconiosis are found. Because of the frequent association of silicosis and tuberculosis, 18 patients with "Pulmonary Tb with Occupational Disease" were admitted during the year, and 20 patients discharged. Some of these patients come to us hoping to use our findings to support them in their claim to the Workmen's Compensation Board, whereas our interest is to discover whether the tuberculous component of their disease is active and to see that the patient receives the treatment he requires, leaving to the Workmen's Compensation Board the task of appraising the disability caused by the dust disease and awarding compensation for such disability. In many cases it is unfortunate that al-

though the fact of disability is undisputable, it is difficult to prove to what extent such disability is due to a border-line silicosis and to what extent to some associated non-compensable condition such as chronic bronchitis, emphysema, or heart disease. Until the levels of Social Assistance granted to disabled persons become truly adequate, regardless of the cause of the disability, these cases will be a problem.

NON-PULMONARY TUBERCULOSIS:

During the year twenty patients were admitted for the treatment of non-pulmonary tuberculosis—19 with genito-urinary Tb and 1 with Tuberculous lymphadenitis, while 21 were discharged with a diagnosis of non-pulmonary tuberculosis. In addition, among those patients discharged after treatment for pulmonary Tuberculosis, 21 were found to have complicating Tuberculous bronchiectasis and 34 other non-pulmonary Tuberculous complications were also noted. (Table 15). Doctor D.B. Archibald remained our Urological Consultant, visiting us at least once monthly and more frequently when required, performing 29 cystoscopic examinations and 6 other minor urological procedures, and accepting our patients (sputum negative and non-contagious) into a regional general hospital for nephrectomies or other required major urological surgery.

TREATMENT FOR TB.

Methods of Anti-Tb therapy have remained essentially unchanged during the past year. Rest, chemotherapy, and surgical resection constitute the therapeutic triad.

Rest:

The degree to which rest therapy is essential is now very widely debated, and in our Nova Scotia Tuberculosis Hospitals both the degree and the duration of rest therapy prescribed have been greatly reduced in recent years. Nevertheless, we continue to stress the fact that it is the reparative forces of the body which do the actual healing of diseased or damaged tissues, and that since it has been proven over the past half-century that such healing progresses better and faster with the body at rest, we should not too quickly abandon this therapeutic tool.

Chemotherapy:

Anti-tuberculosis drugs have completely altered tuberculosis treatment during the past fifteen years. All new active cases receive at least two and frequently three of the mainline anti-Tb drugs (Streptomycin, Isoniazid, PAS) or of the secondary anti-Tb drugs (Cycloserine, Ethionamide, Viomycin, Pyrizinamide, Isoxyl) in varying combinations. (Table 13) It is noted that these drugs do not heal the disease but by inhibiting the multiplication of the bacilli make it easier for the body to overcome the invading forces. Unfortunately, in some cases (particularly if the patient is uncooperative and therapy is intermittent) bacilli become resistant to therapy, and in other cases because of the development of allergy or toxicity to the medication, otherwise effective drugs cannot be used. Consequently, chemotherapy alone may fail to bring about complete healing of the disease.

Surgical Resection:

In such cases, and to reduce the hazard of reactivation of the disease in later years, areas of incompletely healed disease may be surgically removed. During the year twenty patients were transferred to the Nova Scotia Sanatorium, in most cases for surgical resection, and fifteen patients returned to Point Edward Hospital to complete post-surgical convalescence and continued medical therapy.

OUT-PATIENT CHEST CLINICS:

We continue to operate out-patient chest clinics, offering a service in helping to establish a diagnosis in patients with chest disease referred to us for opinion, or in assessing the activity or inactivity of the disease in patients known to have or have had tuberculosis, or in helping to control chemotherapy in patients still under active treatment.

The major responsibility for "out-patient" work remains with the Directors of the Public Health Units, working in cooperation with family physicians and regional hospitals, and our responsibility has been to accept cases referred to us, or cases presenting therapeutic problems (e.g. patients on second-line rather than first-line chemotherapy). During the year we had some 450 out-patient chest clinic visits, during which 416 chest x-rays were taken (including 185 on DVA patients).

AFFILIATE COURSE IN NURSING:

During the year we accepted 162 students from six schools of nursing for a four-week affiliate course in tuberculosis and chest diseases. Insofar as a large number of our new active cases are discovered in the general hospitals, and insofar as tuberculosis will be a continuing problem throughout the lifetime of student nurses now graduating, we consider this participation in the training of student nurses to be a valuable contribution to the public health program of the province. Students came to us from:

St. Joseph Hospital	21	Sydney City Hospital	25
Glace Bay General Hospital	18	St. Elizabeth Hospital	32
St. Rita Hospital	23	St. Martha Hospital	43
			162

TUBERCULOSIS REHABILITATION PROGRAM

The Tuberculosis Rehabilitation Program was launched a number of years ago, when there was a much greater emphasis than at present on getting the Ex-Tb Patient back to a "lighter job", in order to reduce the hazard of reactivation of his disease. With improved therapy in recent years in most cases it is now possible for the patient, after treatment, to return to his former occupation, while at the same time because many of our patients are now in the older age groups a complete change of occupation becomes more difficult and less practical, and fortunately less necessary.

Thus the duties of the Rehabilitation department have to some extent changed throughout the years. They may now be classed as:

(a) **Social Service**—determining the needs, not only of the patient but also of his family, and helping him to meet those needs.

In many cases this merely means helping him to make application to the appropriate authority for Mothers' Allowance, Social Assistance, Old Age Assistance, and so forth. If the patient is assured that his family is being cared for it becomes easier for him to settle down "on the cure"; if he continues to worry about outside problems, he frequently leaves against medical advice, before his disease is brought under adequate control. Some of our patients also require assistance prior to discharge, the elderly in finding adequate living accommodations, the younger in arranging for post-discharge vocational training.

(b) **Academic and Vocational Training.** Although many of our patients are in the older age groups (39 of the 176 admissions to the Tb service were 60 years of age or over), nevertheless we still admit children and young people (13 of our Tuberculosis admissions were under ten years and another 10 were under twenty years of age—see Table 4). Patients were encouraged to continue their schooling or to take further studies:

Academic Instruction	Number	**Business & Industrial**	Number
Bedside tutoring			
Ages 5-16 yrs	13	Elementary bookkeeping	3
Ages 17-21 yrs	2	Sewing	9
Over 21 yrs	7	Woodwork	6
Correspondence courses	1		
	23		18

(c) **Handicraft:** In addition to Vocational training, various handicrafts have proved popular in the hospital. These certainly have some therapeutic value, if only to provide emotional stimulation and prevent boredom with a long hospital stay. But some patients have become quite proficient in various handicrafts, making gifts for family and friends, or selling items to provide "pocket money". Unfortunately, materials are expensive and handicraft costs become prohibitive unless some market is found. Some indication of the volume of work performed is given by the fact that during the year patients purchased from the hospital, at cost, handicraft materials in the amount of $3800.00.

Among the chief handicrafts this year were:

Leathercraft	79	patients involved
Foam	28	" "
Felt	6	" "
Copper Tooling	2	" "
	115	" "

(d) **Entertainment:** Another phase of the activity of the Rehabilitation Department was entertainment, organizing activities to break the monotony of long hospitalization. In this category comes supervision of the patients' library and seeing that books and magazines are distributed to those who want them. In this category also came the showing of movies to the patients, usually on a weekly basis (films provided through the courtesy of the Sergeants' Mess, 3 Militia Group Headquarters, Sydney), and also the supplying of T.V. sets for the patients. We never have enough to go around—but we do wish to thank The Cape Breton East Tuberculosis Association for two additional sets this year, given for educational purposes, but used also for entertainment.

ACKNOWLEDGEMENTS:

Entertainment was brought in by various local community organizations—the annual Christmas Party sponsored by Sydney Branch No. 12 of the Royal Canadian Legion, monthly card parties complete with prizes and refreshments sponsored by the I.O.D.E., a car drive in the Walter Callow Coach. Other groups such as church organizations and service clubs, have assisted us at Christmas and throughout the year. They are too numerous to list here, but each one added a bit of cheer to the hospital stay of our patients, and they were appreciated.

In listing such activities, we should also like to express appreciation to the clergymen of the various faiths for their faithful and cheerful attention to hospitalized patients, as well as to staff, and to say our thanks to all those who, individually or in groups, visited our patients or in other ways helped to support them during long months of treatment.

VISIT FROM THE LIEUTENANT-GOVERNOR

We were honoured to have a visit from the Lieutenant-Governor of Nova Scotia, the Honourable H. P. MacKeen, C.D., Q.C., and Mrs. MacKeen, on the afternoon of November 30th. Both his Honour and Mrs. MacKeen charmed and delighted patients and staff by the interest shown in our activities and our problems. It was a gracious visit from worthy representatives of the Queen.

MEDICAL STAFF and CONSULTANTS:

We have three full-time physicians on staff, the Medical Superintendent, much of whose time is consumed with administrative matters, and two loyal staff physicians. In addition we have two paid consultants, Doctor D. B. Archibald, Urologist, whose work has been mentioned, and Doctor Wm. MacIsaac of Margaree, who continued to visit us once a month, or more frequently on demand, and who performed 41 bronchoscopic examinations during the year. These were useful, not only in discovering the presence of endobronchial tuberculosis or, equally important, certifying its absence so that resectional surgery could be considered but also in discovering endobronchial carcinoma and other bronchial conditions.

In addition, we have had frequent occasion to call upon other physicians for assistance. We would specifically mention Doctor E. C. MacDonagh, of the Cape Breton Mental Health Clinic, who has been our psychiatric consultant, Doctor R. Mathieson of the City of Sydney Laboratory, Doctor A. W. Gyorfi of the St. Rita Hospital Labortory and Doctor Hilda Tremblett of St. Elizabeth Hospital Laboratory, all of whom have supplied pathological services to our hospital, and of course the staff of the Department of Public Health Laboratory in Halifax, who have done our tuberculosis cultures for us. Mention should be made also of Doctor H. R. Corbett, of St. Rita Hospital, consultant radiologist, and Doctor Helen Holden of the Nova Scotia Sanatorium, who has routinely interpreted our electrocardiograms.

To these, and to other physicians in the Sydney area who have from time to time come to our assistance, we are grateful.

HOSPITAL STAFF:

We are fortunate in having an adequate and stable staff. We have been repeatedly pleased to hear so many patients, as they were being discharged, comment on the excellent nursing care they have had during their hospital stay. Certainly many of our nurses have shown a faithfulness and devotion "above the call of duty" when they arrived hours before their time to go on duty, just because a storm was threatening and the roads might be blocked later.

And this word of thanks should also be extended to our medical staff, the business office and medical records staff, housekeeping and dietary personnel, and others. We are deeply indebted to our Dietitian, Mrs. Edith Burchell, who came back to us from retirement after a heart attack, to supervise our diets and our busy hospital kitchen, who would like to retire again, but is carrying on because no replacement has been found.

THE FUTURE

With the closing of the Point Edward Naval Base some assumed that Point Edward Hospital would close also. But, of course, there is little connection between the two. At present our patient volume remains high, higher this year than last, and the Hospital is rendering services to the community which are essential to the goal of control and ultimate eradication of tuberculosis. But the time will come, we sincerely hope, when our patient body will drop below the number of empty beds available at the Nova Scotia Sanatorium in Kentville. Then the decision will have to be made whether to continue the operation of Point Edward Hospital, or to transfer tuberculosis patients requiring active hospitalization to the Nova Scotia Sanatorium and to create some alternative facility to continue the diagnostic and investigative phase of our work. But this remains in the future, and our crystal ball is clouded.

Tuberculosis remains a problem, and vigorous control measures must be carried out for many years to come. The recent prevalence of local epidemics of the disease, and the up-swing in the number of new active cases, should serve as a warning that complacency could spell catastrophe.

Table 1

STATISTICAL REPORT OF ADMISSIONS AND DISCHARGES

	1964 Total	1965 Male	1965 Female	1965 Total
Patients in Hospital at beginning of year	76	61	27	88
Total Admissions during the year	191	163	54	217
Total Under Care During the year	267	224	81	305
Total Discharges during the year	179	173	58	231
Patients in Hospital at end of year	88	51	23	74
Total Patient-Days	28,910	22,807	8,628	31,435
Average Daily Census	79	62	24	86
Patient-Days of patients discharged or dead	26,484			36,221
Average Length of Hospital Stay	148			158

Table 2

ADMISSIONS DURING THE YEAR: SOURCE OF PATIENTS

	1964 Total	1965 Male	1965 Female	1965 Total
Tuberculous:				
First Admissions	61	55	25	80
Readmissions, to Resume treatment	23	26	3	29
Transfers from other Tb Hospitals	16	10	5	15
Readmissions, to continue treatment	6	7	1	8
For Review and Assessment only	43	35	9	44
Total	149	133	43	176
Non-Tuberculous				
Staff	2	....	1	1
Other, investigation	40	30	10	40
Total	42	30	11	41
Total Admissions	191	163	54	217

Table 3

ADMISSIONS: DIAGNOSIS OF PATIENTS ADMITTED DURING THE YEAR

	Male	Female	Total	%
A. Tuberculosis				
Primary	16	7	23	13.1
Minimal	22	6	28	15.9
Moderately Advanced	36	17	53	30.1
Far Advanced	26	7	33	18.7
Pleurisy with effusion	....	....	....	....
Empyema	1	....	1	0.6
Pulmonary Tb with Occupational Disease	18	....	18	10.2
Genito-urinary Tuberculosis	14	5	19	10.8
Tbc Adenitis	....	1	1	0.6
	133	43	176	100%

B. NON-TUBERCULOUS			
Staff:			
Bartholin's Abscess	....	1	1
Other:			
Angina Pectoris	1	....	1
Atherosclerotic Heart Disease	1	....	1
Hypertensive Heart Disease	....	1	1
Polycythaemia Rubra Vera	1	....	1
Aspergillosis, pulmonary	1	....	1
Bronchial Asthma	....	1	1
Bronchitis, chronic	9	2	11
Bronchiectasis	3	1	4
Bronchopneumonia	3	....	3
Emphysema	1	....	1
Empyema	1	1	2
Lung abscesses, multiple (staph.)	1	....	1
Pneumonitis	1	....	1
Pulmonary infarct	....	1	1
Carcinoma of Lung	5	....	5
Sarcoidosis	....	1	1
Lymphadenitis	....	1	1
Pyelonephritis	1	....	1
Diabetes Mellitus	....	1	1
Undiagnosed pulmonary disease	1	....	1
	30	11	41
Total	163	54	217

Table 4

ADMISSIONS: AGE AND SEX OF PATIENTS ADMITTED

Age	TUBERCULOUS			NON-TUBERCULOUS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0— 9	9	4	13	....	....	....	9	4	13
10—19	7	3	10	....	2	2	7	5	12
20—29	12	8	20	....	1	1	12	9	21
30—39	13	7	20	2	1	3	15	8	23
40—49	20	8	28	2	4	6	22	12	34
50—59	40	6	46	11	1	12	51	7	58
60—69	20	1	21	9	1	10	29	2	31
70 & over	12	6	18	6	1	7	18	7	25
	133	43	176	30	11	41	163	54	217

Table 5

RESIDENCE OF PATIENTS ADMITTED

Cape Breton County	127	
Inverness County	26	
Richmond County	33	
Victoria County	21	
Cape Breton Island		207
Antigonish County	3	
Halifax City and County	3	
Pictou County	2	
Guysborough County	1	
Nova Scotia Mainland		9
Other Provinces of Canada	...	
Other Countries—Greece	1	1
Total Admissions		217

Table 6

SPONSORSHIP OF HOSPITALIZED PATIENTS

	In Hosp. Jan. 1/65	Admitted 1965	Discharged 1965	In Hosp. Dec. 31/65	Hosp. Days
Dept. National Health & Welfare					
(a) Immigration Medical Service	0	0	0	0	0
(b) Indian and Northern					
—Eskasoni Agency	16	15	24	7	3858
—Shubenacadie Agency	..	1	....	1	218
(c) Sick Mariners' Service	....	1	1	....	100
Dept. Veterans' Affairs	....	11	9	2	350
Reciprocal Agreement—Ontario	1	....	1	....	332
N. S. Dept. Public Health	71	189	196	64	26577
	88	217	231	74	31435

Table 7

DISCHARGES DURING THE YEAR: CLASS OF PATIENT

	Male	Female	Total
Tuberculous	142	46	188
Non-Tuberculous			
Staff	....	1	1
Other	31	11	42
	173	58	231

Table 8

DISCHARGES: ADMISSION DIAGNOSIS OF DISCHARGED TUBERCULOUS PATIENTS

	Male	Female	Total	%
Primary	15	7	22	11.7
Minimal	24	9	33	17.6
Moderately Advanced	38	17	55	29.3
Far Advanced	28	7	35	18.6
Miliary	....	....	....	....
Silico-tuberculosis	20	....	20	10.6
Pleurisy with effusion	1	....	1	.5
Empyema	1	....	1	.5
Non-pulmonary tuberculosis	15	6	21	11.2
	142	46	188	100%

Table 9

DISCHARGES: CLINICAL CONDITION OF PATIENTS ON DISCHARGE

	Male	Female	Total	%
Pulmonary Tuberculosis:				
Inactive	26	5	31	16.5
Quiescent	38	15	53	28.2
Active—improved	48	19	67	35.6
Active—unimproved	5	1	6	3.2
Dead—From Tb or complication	5	....	5	2.7
From unrelated disease	5	....	5	2.7
Extra-pulmonary Tuberculosis				
Inactive	3	1	4	2.1
Quiescent	3	4	7	3.7
Active—improved	9	1	10	5.3
Active—unimproved	....	....	....	....
Dead	....	....	....	....
	142	46	188	100%
Non-Tuberculous:				
Recovered or improved	13	10	23	53.5
Unimproved	15	2	17	39.5
Dead	3	....	3	7.0
	31	12	43	100%

Table 10

TYPE OF DISCHARGE OF PATIENTS WITH TUBERCULOSIS

	Male	Female	Total	%
On Medical Advice	107	38	145	77.1
Transfer to N. S. Sanatorium	13	7	20	10.6
Irregular Discharge				
Against medical advice or AWOL	11	1	12	6.4
Disciplinary	1	....	1	.5
Died	10	....	10	5.3
	142	46	188	100%

Table 11

MARITAL STATUS OF DISCHARGED PATIENTS

	Male	Female	Total
Single	48	20	68
Married	102	29	131
Widowed	21	7	28
Separated	2	2	4
	173	58	231

Table 12

RELIGION OF DISCHARGED PATIENTS

	Male	Female	Total
Roman Catholic	117	37	154
Church of England	16	1	17
United Church of Canada	25	13	38
Baptist	1	1	2
Presbyterian	9	4	13
Salvation Army	4	2	6
Greek Orthodox	1	....	1
	173	58	231

Table 13—

PATIENTS DISCHARGED: TUBERCULOSTATIC DRUGS USED WHILE IN HOSPITAL

Streptomycin	133
Isoniazid	158
PAS	124
Cycloserine	38
Ethionamide	13
Isoxyl	9
Viomycin	3
Pyrizinamide	2
Oxytetracycline	1

Note that of 188 patients discharged from the Tuberculosis service, 158 received anti-Tb medication on this admission. The other 30 patients were in for review and assessment only, and were considered not to require active treatment as their disease was inactive.

Table 14

DISCHARGED TB PATIENTS: ASSOCIATED NON-TBC CONDITIONS PRESENT

Alcoholism	2	Lues, latent	1
At herosclerosis	1	Menopausal depressive state	1
Arteriosclerotic cardiovascular disease	4	Mental Retardation	1
Hypertensive cardio-vasc disease	6	Multiple Sclerosis	1
Bronchial Asthma	5	Otitis Media	2
Bronchopneumonia	8	Osteoarthritis lumbar spine	1
Carcinoma— Lung	2	Peptic Ulcer	10
Bladder	1	Pneumoconiosis	20
Face (gingival)	1	Psychopathic personality	1
Stomach	1	Raynaud's Disease	1
Cataracts, bilateral	2	Rheumatoid Arthritis	4
Cervical Erosion	2	Carditis	1
Cystocoele	2	Pleuritis	1
Diabetes Mellitus	18	Pneumonitis	1
Emotional Instability	1	Rhinitis, chronic	1
Emphysema	4	Schizophrenia	1
Epilepsy	1	SM Toxicity	2
Hypersensitivity to PAS	12	Vertigo	1
to Streptomycin	9	Spontaneus pneumothorax	5
to Cycloserine	1		
to Penicillin	1		

Table 15

DISCHARGED TB PATIENTS: ASSOCIATED TUBERCULOUS COMPLICATIONS

(In addition to the principal Tbc diagnosis as indicated in Table 8)

Tbc cervical lymphadenitis	1	Bronchopleural fistula	3
Renal Tuberculosis	2	Tbc bronchiectasis	21
Perinephric abscess	1	Tbc endobronchitis	5
Tbc Ureteritis	3	Tbc laryngitis	1
Tbc Ureteral stricture	1	Tbc tracheobronchitis	2
Tbc Cystitis	4	Tbc Spondylitis	1
Tbc Epididymitis, bilateral	1	Tb of sternum	1
Tbc Prostatitis	1	Tb of hip	1
Tbc Enteritis	1	Tb of wrist	1
Tbc Ileitis, resected	1	Amputation for Tb of ankle	1
Pleurisy with effusion	2		

Table 16

OUT-PATIENT SERVICES

	Patients	Visits
Chest Clinic —D.V.A. patients	136	185
Other out-patients	121	265
Staff Chest x-rays		640
Staff Clinic	118	310
Tuberculin Testing —Heaf Tests	28	
Mantoux (PPD)	7	

Table 17

REPORT OF X-RAY DEPARTMENT

	Patients	Out-Patients	Staff	Total Exams	T.M. Units	R.M. Units
Chest, single	556	409	638	1603	3206	3206
multiple	202	7	1	210	630	420
Planigraphic series	128	4	1	133	665	665
Bronchograms, unilateral	22	....	....	22	88	88
bilateral	18	....	....	18	90	108
Abdomen	5	2	....	7	14	14
Gall Bladder	3	2	....	5	20	15
Pyelogram, intravenous	8	....	1	9	54	27
retrograde	27	....	....	27	108	54
Bones & Joints						
Ribs and Shoulders	7	....	1	8	24	16
Skull, sinuses	7	....	....	7	21	21
Hips and Pelvis	8	1	....	9	18	20
Spinal Column	30	5	1	36	144	108
Extremities	34	....	9	43	86	86
Total Exams	1055	430	652	2137		
T.M. Units	2960	893	1315		5168	
R.M. Units	2660	879	1309			4848
Electrocardiograms	134	9	5	148		
B.M.R.	....	....	....	....		
Pulmonary Function Tests	47	....	....	47		

Table 18

LABORATORY REPORT: WORK PERFORMED

	Examinations	Unit Value	Total Units
URINALYSIS			
Routine	833	2	1666
Each Constituent	6	1	6
Urobilinogen	1	2	2
PSP Test	2	3	6
Bence-Jones Protein	8	2	16
			1696
BIOCHEMISTRY			
Bilirubin (Direct + Total)	1	4	4
Glucose	433	2	866
Glucose Tolerance	4	10	40
Non-Protein Nitrogen	171	4	684
Alkaline Phosphatase	552	6	3312
Protein (Total)	2	3	6
Protein (Total + Differential)	15	6	90
Urea Nitrogen	173	4	692
Occult Blood	43	1	43
Tubeless Gastric Analysis	1	2	2
Biochemistry collections	1079	1	1079
			6818
HEMATOLOGY			
Hematocrit	1027	1	1027
Hemoglobin	1110	1	1110
Bleeding Time	1	1	1
Coagulation Time	1	2	2
Differential	1057	2	2114
White Blood Count	1417	1	1417
Prothrombin Time	3	2	6
Red Blood Count	6	1	6
Sedimentation Rate	1138	1	1138
Hematology collections	1274	1	1274
			8095
BACTERIOLOGY			
T.B. Slides (Sputa)	181	3	543
T.B. Concentrations	679	4	2716
Ova & Parasites	5	4	20
			3279
CEREBROSPINAL FLUID			
Cell Count	7	1	7
Protein	7	2	14
Chlorides	7	3	21
Sugar	7	2	14
			56
Total Units Work Performed			19944

Table 19

LABORATORY REPORT: WORK REFERRED TO OTHER LABORATORIES

	Examinations	Unit Value	Total Units
BACTERIOLOGY			
Urine Cultures	100	6	600
Miscellaneous Cultures	57	6	342
Sputum Cultures	94	6	564
T.B. Cultures	2690	6	16140
Blood Cultures	2	6	12
Fungi Cultures	15	7	105
			17763
BIOCHEMISTRY			
CO_2 Combining Power	5	4	20
Creatinine	2	3	6
Icterus Index	9	1	9
Acid Phosphatase	2	6	12
Phosphorus	3	4	12
Potassium	18	3	54
P.B.I.	1	12	12
Cephalin-Cholestrol Flocculation	8	2	16
Chlorides	18	3	54
Cholesterol	2	5	10
Calcium	19	4	76
Bilirubin (Direct + Total)	4	4	16
Pregnancy Test	1	8	8
Protein (Total + Differential)	5	6	30
Sodium	18	3	54
Electrophoresis	4	6	24
Thymol Turbidity	8	2	16
Uric Acid	1	3	3
Zinc Sulphate	5	2	10
Renal Calculus	1	7	7
			449
BLOOD BANK			
Cold Agglutinins	1	2	2
Direct Matching + Coombs	2	4	8
			10
SEROLOGY			
VDRL	206	1	206
Wassermans	4	2	8
Widal Test	1	6	6
Antistreptolysin Titer	1	5	5
			225
HISTOLOGY			
Surgical Specimens	24	8	192
Cytology, cervical	2	4	8
bronchial	128	5	640
			840
Total Units Work Referred out			19,287

Table 20

REPORT OF OPERATING ROOM DEPARTMENT PROCEDURES:

By our Consultants:

E.E.N.T. PROCEDURES (Dr. W. MacIsaac)

Bronchoscopy	41
Bronchography	1
Bronchial Biopsy	2
Laryngeal Examination	1
Consultations	7

UROLOGICAL PROCEDURES (Dr. D. B. Archibald)

Cystoscopic Examinations	29
Urethral Dilatation	4
Transurethral Prostatic Resection	1
Replacement of Nephrostomy tube	1
Rectal Examination	1
Other Consultations	8
Spinal Anaesthesia	1

In addition, Doctor Archibald performed a number of major procedures (nephrectomy, nephrostomy, etc.) on our patients in General Hospitals, free to the patient under our Tuberculosis Program.

By our Full-Time Staff:

Most of the "Out-Patient Services" detailed in Table 15 were processed through the O.R. Department. In addition, many minor procedures on in-patients were done in the Operating Room Suite. Most of the 560 procedures recorded were very minor ones, and do not warrant detailed reporting.